# State Funding for Career and Technical Education

# Report of State and Local Activities and Expenditures Fiscal Year 2016

Submitted to the
State Board of Education/State Board for Career and Technical Education
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#### Overview

Following the provisions of Nevada Revised Statutes 388.396, the Department of Education must report the manner in which state funding for career and technical education is expended. In fiscal year 2016, \$10,443,822 was authorized in the Department of Education's budget for CTE programs in school districts and charter schools. This report provides information about how the funds were allocated and expended.

NRS 388.392 stipulates the following: (1) up to 7.5 percent of funds may be used for state leadership activities; (2) 30 percent of the funds must be allocated for grants to school districts or charter schools; these grants must be presented to the industry sector councils for funding recommendations; (3) 5 percent of the funds are awarded to career and technical student organizations; and (4) the remainder of the funds are allocated based on the proportion of duplicated enrollments of CTE students.

u	State Leadership:	\$0
	Competitive Grants:	\$3,133,146
	CTSOs:	\$0
	Allocation Grants:	\$7,310,675

State leadership funds were not allocated in legislation during this biennium.

Competitive grant funds were awarded to eleven school districts. Members of the industry sector councils were invited to serve on a review team to develop funding recommendations. Those recommendations were then submitted to the superintendent of public instruction and allocations to school districts were made following the industry sector council recommendations.

Career and Technical Student Organization (CTSO) funds were not allocated in legislation during this biennium.

The remaining funds were awarded to school districts based on the duplicated enrollment counts of students in grades 9-12. (Storey County School District reported to the Department it does not provide CTE programs.)

Funds granted to school districts and charter schools must be based on the following criteria:

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Standards and instruction
Leadership development
Practical application of occupational skills
Quality and competence of personnel
Facilities, equipment and materials
Community, business and industry involvement
Career guidance
Program promotion
Program accountability and planning
Pupil-teacher ratio
Whether the program will lead to a national credential or certification

# **Part I: State Leadership Funds**

State Leadership funds were not allocated in legislation during this biennium.

# **Part II: Competitive Funds**

Of the total funds available, \$3,133,146.60 or 30 percent of the funds, were allocated for competitive grants for the purposes described earlier in this report. These funds were allocated in two rounds. The table below shows the total amounts requested, the amounts awarded in each round, and the amounts expended by school district.

Descriptions of expenditures and outcomes by each participating school district are shown below and on the following pages.

School District	Amount Requested Round 1	Amount Awarded Round 1	Amount Expended Round 1	Amount Requested Round 2	Amount Awarded Round2	Amount Expended Round 2	Total Amount Expended
Carson City	81,746.15	63,390.00	63,243.62	133,937.67	132,531.00	132,323.46	195,567.08
Churchill	0.00	0.00	0.00	56,623.06	56,623.00	48,786.15	48,786.15
Clark	1,526,596.92	589,462.07	571,086.88	1,300,848.88	708,073.51	687,521.77	1,258,608.65
Douglas	91,406.85	65,216.93	62,950.23	453,793.30	453,793.30	430,760.30	493,710.53
Elko	0.00	0.00	0.00	287,129.30	106,000.00	104,644.00	104,644
Lander	28,000.00	25,000.00	24,484.47	33,231.00	33231.00	33,315.05	57,799.52
Lincoln	56,360.00	5,260.00	5,258.93	45,370.00	17,530.00	17,530.00	22,788.93
Lyon	116,436.00	109,436.00	25,251.45	149,871.00	40,194.00	3,278.18	28,529.83
Mineral	59,304.39	0.00	0.00	60,137.19	60,137.19	40,954.96	40,954.96
Washoe	261,601.00	145,382.00	143,777.03	479,766.00	420,066.00	419,487.87	563,264.90
White Pine	0.00	0.00	0.00	76,531.00	76,531.00	76,531.00	76,531.
Totals	\$2,221,451.31	\$1,003,147.00	\$896,052.61	\$3,077,238.40	2,104,800.00	1,995,132.94	\$2,891,185.55

#### **Carson City School District**

Round One Funding Awarded: \$63,390.00
Round One Funding Expended: \$63,243.62
Round Two Funding Awarded: \$132,531.00
Round Two Funding Expended: \$132,323.46

# **Overall Description of the Round One Project:**

Utilizing State CTE Competitive funds to expand programs, Carson City School District was able to increase the number of completers and expand the scope of their Health Science Program.

The District recognized that Health Occupations is one of the nation's fastest growing professions and the District must support a large number of students to move through this program. In order to increase the number of completers and expand the scope of our Health Science program while providing the highest quality education, training, and business partnership involvement, the district did the following: (1) increased the number of students who can take the level one and two courses, (2) increased the number of offerings in all levels of Health Science, (3) provided training opportunities to our instructors, (4) partnered with Carson City Fire Department for training and hands-on clinical experiences, and (5) equipped and provided supplies and materials for a state of the art laboratory facility for use by all Health Science programs (Sports Medicine; EMS/EMT; Health Science I and II; and Pharmacy Practice.)

1. **Increased Student Participation:** As a result of work efforts associated with this grant the District has been able to expand the number of students participating in the CTE program. Please see the following table which highlights the number of students enrolled in each one of the CTE programs supported by this grant. This change equates to a thirty percent increase in the number of students in the health occupations program.

Carson City School District
Number of Students Participating in CTE
Health Occupations Programs

Program	2014-2015	2015-2016		
Pharmacology	4	15		
Health Science I	91	141		
Health Science II	26	80		
Sports Medicine I	69	26		
Sports Medicine II	9	23		
EMT	16	7		
EMS	0	18		
Totals	215	310		

- 2. **Increased Number of Health Science Course Offerings:** The District utilized grant resources to expand both the pharmacology and EMT course offerings as a result of funds invested from the grant.
  - a. **Pharmacology:** Funds were used to purchase a teacher prep-period. The teacher assigned to the pharmacology program already had a full course load. This allowed the teacher to move from five to six courses and she could then add pharmacology. The District also purchased Pass-Assured which is an online support curriculum that the teacher used to provide a high quality learning pathway for participating students. This combination of steps made it possible to offer the pharmacology class to participating students.
  - b. **Emergency Medical Services:** This is a new course that was added during the 2015-2016 school year. Due to the difficulty students had faced in passing the EMT end of sequence exam, the District recognized the need to add an additional course to better prepare students in the EMT sequence. This course was taught by Fire Department and the cost of that partnership was included in this application.
- 3. **Provided Training Opportunities to Instructors:** Teacher professional development is an important part of creating the most effective learning experience for students. The District utilized funds to send a teacher to the Master Teacher Institute.
- 4. Partnered with Carson City Fire Department for student training and hands on experience: As stated earlier the fire department provided instruction and training for students to participate in the EMS course.
- 5. **Equipped and provided materials and supplies for health science programs:** In order for students to gain the basic knowledge and skills related to being a high functioning member of the medical field, students need access to high quality equipment and supplies. The District utilized funds for both these purposes.
- 6. **Other investments:** Finally, the District recognizes the important role that HOSA activities play in preparing students to enhance both their education and workforce readiness. In order to expand the opportunities for students the District utilized some of these funds to help offset the costs for both the State and National HOSA experiences.

In conclusion, the District has used CTE competitive funds to make a significant investment in the Health Science students and professional staff. The efforts have enhanced the quality of the program as well as increased the number of students who participated in the program

#### How program expansion will lead to improved program completion rates

The financial investment for the 2015-2016 school year will enhance program completion rates. In the area of pharmacology the District purchased the Pass-Assured curriculum which is aligned to state standards. This will provide an effective learning and feedback pathway for students.

As stated above, the District partnered with the Fire Department to build the EMS course for students. This course will serve as a bridge course for students in this program. This additional course will help students have a much deeper understanding of the EMT curriculum, thus increasing the possibility that they will both complete the sequence and earn the related certificate. A total of eighteen students participated in this program.

#### How the new program supports economic- and workforce-development priorities of the State

The need for skilled workers in the healthcare industry continues to rise. According to the Bureau of Labor Statistics, the healthcare and social assistance industry is one of the largest industries in the country, with nearly 22 million jobs projected for 2022. This is an increase of nearly 5 million jobs from 2012 to 2022. Employment in the healthcare and social assistance industry is projected to increase 29 percent through 2022, compared to an average of 11 percent for all industries. The healthcare and social assistance industry group is projected to be the fastest growing industry overall from 2012 to 2022. (Bureau of Labor Statistics).

#### Funds from the State CTE Competitive Fund were expended in the following ways:

Each of the following expenditures was used to expand and enhance the health science teaching and learning experience.

- 1. **1/6 prep buy-out:** Expanded teacher workload by adding one additional class and it was pharmacy practice. The buyout provided the teacher time in their schedule to teach the pharmacology program.
- 2. **Contract for FD Emergency Medical Service instruction to students:** Carson City Fire Department provided training for students to be prepared to pass the National EMT exam. This partnership allowed the District to add this essential course to this sequence.
- 3. **Health Science II students to take Web Based National Consortium for Health Ed Assessment:** Health Science I and II standards provides a bank of questions that align with health science standards and are used to better prepare students for the upcoming state exam. These are used by health science educators to enhance both the curriculum and assessments of the health science courses.
- 4. **Attend Nevada HOSA (3 teachers, 2 chaperones) for Supervision and student guidance at HOSA conference:** As stated above, the District recognizes that these are essential activities to develop well prepared program graduates from the Health Science Program.
- 5. National HOSA (2 teachers, 1 chaperone) for Supervision and student guidance at HOSA conference: As stated above, the District recognizes that these are essential activities to develop well prepared program graduates from the Health Science Program.
- 6. **Master Teacher Institute Chicago (1 teacher):** Training experience to support teacher to improve professional practices related to the program.
- 7. **Health Science Lab and Medical Supplies:** Supplies used to provide realistic learning experience for participating students.
- 8. **Equipment:** Treatment tables, hospital equipment, mannequins and gurneys. Required equipment for health science programs.
- 9. **Books:** Health science books and workbooks. Learning materials to support students' participation in the program.
- 10. **IT/software:** Pharmacology career pathway learning module. This purchase included a cart which functions as a problem-solving work station for students.
- 11. **Pass-assured online curriculum for health science:** Pharmacy online curriculum for Pharmacy III. This is used to enhance both the curriculum and assessments for this course sequence.

Throughout the life of this grant, the District made strategic investments in the program to enhance the opportunities that all health science students have in the Carson City School District. The funds were used as intended and the District followed the implementation plan established when it received the grant.

# **Overall Description of the Round Two Project:**

The Carson City School District supported two program components with the CTE Competitive Funds during 2015-2016 school year, these included College and Career Readiness and Manufacturing. Each of the four target areas are addressed separately in the following section.

# College and Career Development - Project Description

The Carson City School District utilized funds to establish a College and Career Readiness Center in Room 104 at Carson High School. The Center is adjacent to the Counseling Office, and serves as a "one stop shop" for students to gain access to career information, academic planning, work experience, internships, and job shadowing opportunities. Students are able to easily connect with business partners and mentors in their field of study by accessing services provided within this office. The District was able to combine these grant resources with Race to the Top resources to establish this office and provide services to students including each of those described here.

The Center was staffed by a College and Career Specialist who worked with individual students and small groups on: college and career planning; preparation of career development plans; career exploration, and articulation options. This specialist worked with students most at risk of not graduating and or completing their course sequence and passing their workplace readiness, and technical skills assessments. This contractor provided ongoing support to students in order to advocate for them to both provide guidance and align resources. This program was highly effective. The District will be continuing this program in the coming year. Additional related support was provided by the administrative assistant who is funded by Race to the Top. This administrative assistant provided logistic support to students to help get the career planning, work and job shadowing experiences aligned and up and running for students.

In addition to this investment, the District hired two contractors, In Plain Site and Brooks Harper to provide services related to program development and motivation. In Plain Site is a group supported by the District to develop a plan to increase the number of non-traditional students for the program. The District implemented that plan and did see an increase in the number of non-traditional students enrolled in all programs offered by the school. Finally, the District hired Brooks Harper to provide a college and career learning activity. This contractor provided a whole group motivational experience designed to raise student awareness and motivation in the area of college and career readiness.

The District believes that the funds invested in this area had a very positive impact on both the program and the students it served.

#### How the new program will lead to improved program completion rates:

The College and Career Specialist worked with our counselors to track the progress of individual CTE students towards their program completion. The Specialist worked with our most at-risk students: those who were at the greatest risk of not graduating because of grades, attendance, credits, etc.; students that didn't have any kind of post-high school plan; and those who were at risk due to their economic situation, language ability, or special needs. The Specialist met with these students on a regular basis to offer help and support throughout the school year. The specialist utilized the data tools provided via Race to the Top to track students' progress in CTE courses and intervene early, before students were in danger of failing a course. By doing this, we believe that effort kept participating students on track to complete course sequences, leading to improved CTE completion rates.

#### How the new program supports economic- and workforce-development priorities of the State:

As part of the Race to the Top efforts, Career Academies are being implemented for all CTE programs at CHS and Pioneer High Schools. One critical component of an academy is authentic involvement with business and industry. The effort described above has helped us to open the doors of the CTE office and involved community representatives in many aspects of our programs including: serving as guest speakers; assisting with curriculum development; participating in "Meet and Greets"; providing internships and other work-based learning placements; and providing field trip experiences. As stated in

the description above, prior to the implementation of this grant, the office lacked a formal College and Career Readiness Center. During this process, staff built additional business partnerships and provided students with individualized attention; reaching out to our most at-risk students. The addition of this project allowed the District the ability to better serve the needs of CTE students and, ultimately, employers who will have access to an increased number of highly-qualified CTE program graduates.

#### Funds from the State CTE Competitive Fund were expended in the following ways:

- Career Specialist Contractor: As described above, the District hired a career specialist
  contractor to work with students to provide ongoing support along their academic and career
  development pathway. This contractor performed essential services to students to monitor
  progress and support the development of interventions for students.
- **In Plain Site:** The District hired a contractor who supported the development and implementation recruitment plan for non-traditional students district wide.
- **Brooks Harper:** The District hired contractor who provided a motivational speech to students on the topic of college and career readiness.

#### **Manufacturing Project Description**

# How the new program will lead to improved program completion rates:

The use of these funds during the 2015-2016 school year targeted the cost to develop, set up, and implement a new manufacturing program. Our original target enrollment was 50 to 75 students. The actual program enrollment number is 127 students. As a result of this new enrollment, the District anticipates that in three years this program will produce over one hundred students who will be certified in the manufacturing field upon the completion of this course. This is an essential need in Carson City, since one of the primary employers is a manufacturing based company. In addition, we expect manufacturing students to tap into the College and Career Readiness Center, where students in the Manufacturing Technologies Program will have opportunities for work-based learning experiences and one-on-one career guidance – thus resulting in improved completion rates.

#### How the new program supports economic- and workforce-development priorities of the State:

The time is now to build a technically skilled workforce in Northern Nevada. According to our business and industry partners at Dream It Do It, Nevada, 50,000 new jobs will be created over the next 5 years. As EDAWN leadership noted recently, approximately 11 new companies will be relocating into this region and, by extension of the 3.2 x multiplier effect, 250,000 people will be coming here as a result of the new jobs. In a recent economic development presentation, EDAWN officials predicted that the majority of these new jobs will be in advanced manufacturing. In fact, it is predicted that between 55 and 68 percent of those companies relocating will be advanced manufacturing entities; and that translates into increased technical jobs. According to the recent report, Why Nevada: For the Manufacturing Industry (Nevada Governor's Office of Economic Development), manufacturing represents a significant segment of Nevada's economy, employing more than 56,000 workers in over 1,800 companies.

As stated previously, the Governor's Office of Economic Development estimates that Tesla will improve the region's manufacturing base by 31 percent and improve the region's advanced manufacturing component by 46 percent over 2004 levels (Governor's Office of Economic Development, courtesy of Bob Potts, GOED Research Director). Tesla/Panasonic will need 6,500 employees to work in their battery plant at the Tahoe Reno Industrial Center. The state has guaranteed that half of the employees will be from Nevada. Representatives from Tesla's Human Resources Department have indicated that the bulk of the workers they will need are not the higher-end engineers, chemists and scientists, but the technician and operators that will run the plant. These techs will need to come from our high schools and colleges.

According to other projections, there are an estimated 35 support companies that will either relocate or establish a supply chain facility in order to feed a 5 million square foot plant that will be churning out 8.2 million batteries a day. This suggests that there will be employment opportunities for young graduates requiring certification in fields as diverse as robotics, robotics maintenance, programming, cyber security, chemistry, automation, automated systems programming and maintenance, machining, CNC operations and programming. Mike Kazmierski, CEO of the Reno-based Economic Development Authority of

Western Nevada, the leading agency in luring new businesses to the greater Reno-Sparks area, and a key player in the bid for Tesla, believes there is a trend in the region's broader new-business profile that could have ramifications on the growth. Kazmierski said: "What we're seeing is more of a technical feel. We're seeing more interest by entrepreneurial and creative (industries)." However, Kazmierski has concerns over sustaining the pace. He points to the region's workforce that will be challenged to accommodate new businesses which he says will demand greater technological expertise. He believes that if we don't have a viable workforce, it could derail progress made and that we need to act now.

A qualified workforce is the top question on prospective companies' minds, according to the EDAWN CEO. Again, the message is loud and clear: A technically proficient, up-graded workforce is needed for the advanced manufacturing climate locating to Northern Nevada. Carson City School District is ready to meet this challenge

# Funds from the State CTE Competitive Fund were expended in the following ways:

- **Manufacturing teacher salary:** This is to hire a manufacturing teacher to set up the curriculum and classroom for the coming year.
- **Mileage:** Cost for teacher to visit local manufacturing and other related sites to gain information to better set up the classroom.
- **General supplies:** Tools safety equipment and related materials.
- **Tech benches:** Work stations for students.
- Enterprise learning systems and multimedia coursewares: Provides learning exercises for students to gain access to manufacturing problems and experiences. This is part of his recommended curriculum. Aligns with workplace readiness skills.
- **EMS training systems:** Manufacturing station to provide professional application experience for students.

#### **Churchill County School District**

Funding Awarded: \$56,623.06
 Funding Expended: \$48,786.15

# **Overall Description of the Project**:

The greenhouse that is being built with the funding received through the competitive grant is allowing the Agriculture course instructor to gear classroom lessons toward more hands-on application that the students are experiencing and will experience through this program.

Students are establishing Supervised Agricultural Experiences that are allowing them to work directly with the Fallon Food Hub to sell the products that they are growing in our greenhouses and raised beds through their store.

The program has applied for Nevada Producer Certification so that students can learn industry standards in class and apply them in the facilities to create independent entrepreneurial projects under our umbrella, which will allow them to learn and profit at the same time.

This addition has allowed the instructor to expand lessons to include the certification process, safe produce handling, and food industry career opportunities as well as create connections with our local agricultural businesses.

#### **Clark County School District**

Funding Awarded: \$1,297,535.58
 Funding Expended: \$1,258,608.65

# **Description of New Programs:**

# **Photography**

Two new Photography programs of study were implemented for the 2015-16 school year at Boulder City High School and Palo Verde High School. Of the 597 total population of students at Boulder City HS, 41 students were enrolled in the Photography program in this initial year of offering and 293 of the 2,968 total population of students at Palo Verde HS. The full sequence of courses for the Photography program of study are already developed and approved through the CCSD Curriculum Commission and are included in the CTE course offerings. These two schools started the programs with the Level 1 courses. Support will be provided to these schools, as all others, to cultivate a culture of completion leading to students becoming completers. Students completing the photography program of study will learn skills, which directly correlate with multiple areas of economic and workforce development. Program standards are designed to guide instruction so that students gain a skill-set to create digital content which aligns with the mobile and online components of doing business and providing service in the 21st century. Funds were expended on equipment and instructional supplies to enable students to meet the state standards.

#### **Forensic Science**

The two new Forensic Science Programs of Study at Sunrise Mountain and Desert Oasis high schools were implemented for the 2015-2016 school year. The Forensic Science programs at these schools enrolled students in the Forensic Science I course of study and 85% of these students are now enrolled in Forensic Science II for the 2016-2017 school year. We anticipate an increased number of completers in the 2017-2018 school year, because of the addition of this program. The two regional forensic crime laboratories in the state of Nevada are lacking sufficient manpower required to process all of the evidence recovered throughout the state. The implementation of these two programs of study is an effort to build and strengthen Nevada's future crime lab workforce. Teachers were given the opportunity to attend professional development presented by industry professionals. Classrooms were provided essential equipment for this new program, along with help in planning curriculum content to meet the state standards.

# **Health Information Management**

Health Information Management (HIM) is a growing segment in the Healthcare field across the nation and Nevada. Two CCSD high schools were able to explore implementing this program of study for their students. Teachers attended the National Health Information Management Systems Society Conference to further their understanding of the growing field. The State of Nevada Health Science Education Department, along with CCSD teachers, developed curriculum standards for the Health Information Management Program of Study. Because of the promise of this program and its alignment with workforce development priorities, East Career Technical Academy is offering this program of study for the 2016-2017 school year.

#### **High School of Business**

Three new High School of Business<sup>TM</sup> (HSB) programs were started in CCSD during 2015-16. They include: Green Valley, Legacy and Silverado High Schools. CTE met with school principals, administrators, teachers and counselors to ensure buy-in for implementing the program and to ensure that this program will serve as an enhancement to existing CTE programs. The HSB courses were previously developed and approved through the CCSD Curriculum Commission and are available in the district course offerings. In alignment with the HSB foundation of providing rigorous curriculum for business programs, funds were utilized for specialized teacher trainings, which are outlined by HSB. Two teachers from each school (Green Valley, Legacy and Silverado) attended two professional development trainings where they received pedagogy and project-based learning training. Each school has formed an advisory committee and determined students who should be enrolled in the program. The Level 1 courses are

currently being offered and 218 students are enrolled for the 2016-17 school year. The CCSD Business and Marketing Joint Technical Skills committee members have given input as to the value of this program in training students who will meet Nevada's future workforce needs. The HSB program in CCSD, beginning with West Career and Technical Academy (the first program implemented in the district), has had great success in students becoming completers and this is anticipated for these new programs as well.

# **Description of Program Expansion:**

#### **Health Science**

Three Health Science Programs in CCSD, Emergency Medical Technician (EMT) at Bonanza HS, Medical Assisting at Mojave HS and Sports Medicine at Desert Oasis HS were expanded. We anticipate the growth of these programs to increase student enrollment and program completers. As the population of Nevada continues to increase, there is an ever present need for more skilled healthcare workers. These programs will give students the opportunity to gain a technical skill set within the Health Science Field and provide our communities with needed qualified and competent personnel. Teachers were provided opportunities for professional development in curriculum content and industry standards. Programs were strengthened with the purchase of industry standard equipment and instructional and technology resources.

#### **Culinary Arts**

With the addition of a second culinary arts teacher, Valley High School was able to double the enrollment in this program of study. The teachers were provided with the opportunity to attend professional development taught by culinary industry leaders. In addition, intensive curriculum lesson planning development was implemented with the help of veteran culinary teachers. Support from the CTE office was ongoing to help this program meet these goals. Las Vegas is projected to need an additional 2,300 culinary workers to meet the demands of the population. The CCSD CTE Culinary Joint Technical Skills Committee has indicated the culinary field is suffering from a lack of entry-level skilled workers. CCSD culinary arts programs will assist to meet culinary demands and increase the number of entry-level skilled employees.

#### **Computer Science Phase 2**

The need for a future workforce that includes individuals who have skills related to programming and computing continues to be a concern both nationally and here in the state of Nevada. During the 2014-15 school year, CCSD began the work of expanding its computer science course offerings. During this time period, we were able to increase course offerings, including the offering of computer science classes at five schools, who previously had no computer science offerings. All 10 schools who offered computer science received resources, instructional and technology supplies and/or personnel, for the expansion and/or improvement of the program.

The 2015-16 competitive grant funding has allowed CCSD to continue these expansion efforts in the following ways:

- 1. Provided course offerings at two additional schools (West Career and Technical Academy and Western High School).
- 2. Provided teacher positions and/or prep buy-outs at five schools to allow the capacity for students to be enrolled in the L2 and L3 courses.
- 3. Provided technology supplies for schools which were lacking sufficient equipment (CADD computers) at Arbor View, Las Vegas and Western high schools.
- 4. Provided books (C++ from Control Structures to Objects plus MyProgramming Lab and Java Programming).
- 5. Provided technology supplies in the form of Raspberry Pi devices (small hand-held device which has CPU, graphics processing unit, operating system, program memory, USB slots, and phone jack) to support hands-on activities in the classroom.
- 6. Provided training fees for four teachers to attend the College Board offered AP Computer Science A training.
- 7. Provided extra-duty pay for teacher mentoring of teachers new to teaching computer Science.

All of these resources have been invested into the CCSD computer science programs for the purpose of providing greater access to a program that has been identified as being a "critical needs" area. In addition, many stakeholders, both nationally and at the state level, have called for greater diversity in students (including females and minority students) who have access to computer science education. CCSD continues this work and believes that progress has been made; but realizing that there is much work left to be done. Below is a snapshot of the progress of computer science education in CCSD over the past two years. Much of this progress can be directly attributed to the state awarding of the competitive grant for computer science.

- Enrollment in computer science increased from 681 in 2013-14, to 990 in 2014-15, and 1143 in 2015-16 (I took out the chart that wouldn't be able to work with ADA formatting and added this bullet.)
- 31.21% increase in computer science enrollment from 2014 to 2015 and 13.39% increase from 2015 to 2016
- Female enrollment in computer science courses increased from 6% to 18% over the 2-year period
- Minority enrollment in computer science courses has increased to 62.5%

# **Description of Program Improvement:**

#### **Video Production**

A large investment in equipment, computers, and industry standard software was made during the 2015-16 school year to enable equal student access across the district's 40 teachers in 34 schools to meet the Video Production standards. As teachers become more familiar with the equipment and spend more time using it in instruction, gains in student achievement are anticipated during the 2016-17 school year and beyond.

#### **Theatre Tech**

The resources and professional development supplied through this grant were targeted to enable the teachers within this new program to meet standards that previously had not been part of their elective courses within the scope of Theatre Tech. The 2015-16 school-year served as a baseline measure of needs to successfully implement the program of study going forward. Through this grant, foundational instructional materials, software, and professional development were provided for 34 teachers, with a district-wide enrollment of 2,044 students.

# **Douglas County School District**

Round One Funding Awarded: \$65,216.93

Round One Funding Expended: \$62,950.23

❖ Round Two Funding Awarded: \$453,793.30

Round Two Funding Expended: \$430,760.30

#### **Overall Description of the Round One Project:**

#### **Program Expansion:**

FY16 State Competitive Grant funds were utilized to expand two programs of study at Douglas High School; Automotive Technology and Graphic Design. The first program, Automotive Technology, was expanded to include a Level 3 completer course. Previously, the Auto Tech program served approximately 75 students in the Level I courses and 25 in Level 2. With the addition of the freshman class in the 2015-2016 school year, there is a greater need for additional sections in Automotive Technology, specifically L3 course work. This project provided students with a higher level of learning and to promote Automotive Technology III as a CTE completer course. Juniors and seniors now have the opportunity to participate in Workplace Readiness Skills and End of Program assessments. Successful students will be eligible to earn the Certificate of Skill Attainment in Automotive Technology and potentially earn CTE College Credit. Additionally, students that are not headed for college immediately will be better trained for entry-level positions in the community.

Now that the Automotive Technology program at Douglas High School has a Level 3 completer course, there are 10 students eligible to receive the state Certificate of Skills Attainment and CTE College Credit. Our goal was to implement the L3 course in the fall of 2015-2016 and that goal has been met. Enrollment for the 2016-2017 school year, shows that there are four sections of Automotive Technology I, one section in Automotive Technology II, and one section of Automotive Technology III with enrollments capping at 25 students in each section. With the addition of the freshmen class moving to the high school, this has strengthened the program creating more sections in all three levels and has generated a larger population of completers. Expanding the Automotive Technology to include an L3 course at Douglas High School has not only benefited the school and district, but it will assist with meeting the goals of the state as well.

According to the Bureau of Labor Statistics Occupational Outlook Handbook the need for highly trained automotive service technicians and mechanics is expected to grow by 9% - 10% annually. As the need for greater fuel efficiency and vehicle safety increases, so will the need for skilled personnel to make the necessary repairs. The Nevada Career Information System website projects that there will be an 7% increase over the next ten years. While many automotive technicians will choose to work for dealership service departments and other automotive service related businesses, approximately 14% of all mechanics are self-employed. The best job prospects will be for those that are highly-skilled and highly-trained. However, there will be strong competition for entry-level positions.

Grant funds were used to provide instructor training for Mechanical & Variable Timing & Valve Train Diagnostics. Materials and curriculum were ordered and in place before start of 2015-2016 school year. One section of Level 3 was in place before start of 2015-2016 school year. Equipment purchased for the Auto Tech III class included the following: V5 Variable Displacement A/C Compressor Cutaway, Automotive Service Excellence ASE Test Prep DVD Set, OBD-II 5 CD Package, Basic Electricity Courseware, Suspension and Steering System and Courseware, and Air Conditioning with Automatic Climate Control Trainer 134-A and Courseware.

The second program, Graphic Design, was expanded to include Level 2 and Level 3 completer courses. Presently, Douglas High School offers Graphic Design I, Graphic Design II, and Graphic Design III. These are highly popular courses with enrollment as follows: Graphic Design I = 85 students (3 sections), Graphic Design = 49 students (2 sections), and Graphic Design III = 4 students (1 section). With the addition of the freshman class this fall, it is anticipated that there will be a greater need for additional sections in Graphic Design, specifically L3 course work. This project is needed to provide students with a higher level of learning and to promote Graphic Design III as a CTE completer course. Juniors and seniors now have the opportunity to participate in Workplace Readiness Skills and End of Program assessments. Successful students will be eligible to earn the Certificate of Skill Attainment in Graphic Design and potentially earn CTE College Credit. Additionally, students that are not headed for college immediately will be better trained for entry-level positions in the community.

According to the Bureau of Labor Statistics Occupational Outlook Handbook, the need for highly trained Graphic Designers is expected to grow by 7% annually. "With the increased use of the Internet, graphic designers will be needed to create designs and images for portable devices, websites, electronic publications, and video entertainment media" (Bureau of Labor Statistics). The Nevada Career Information System website projects that in the state of Nevada, job growth for Graphic Designers will be approximately 12% over the next ten years. "Demand will increase significantly for those who work with various types of online media. The need for designs and media for mobile applications, Internet, and video entertainment will create most of the growth in this occupation" (Nevada Career Information System). Competition for Graphic Design jobs will be strong. Those that have a Bachelor's degree will have the best chance at employment. By offering a completer course in Graphic Design at Douglas High School, students will be well suited for entry-level employment or for post-secondary training.

#### **Bureau of Labor Statistics:**

#### Nevada Career Information System:

Grant funds requested would be used specifically at Douglas High School. There are no other Graphic Design programs in our district.

According to the 2013-2014 District Accountability Report, Douglas High School provides educational opportunities to the following special populations: Students with disabilities (IEP) = 12.08%, English Language Learners (ELL) = < 1%, and as of October 31, 2014, 23.8% of students at DHS participate in the Free and Reduced Lunch (FRL) program. The Graphic Design program provides students of all abilities and status an opportunity to succeed. By adding a Level 3 completer course, it will strengthen the embedded goal of this program to provide students of any socioeconomic status or physical ability the chance to become eligible for state certification and CTE College Credit, and ultimately enroll into college and become productive citizens. The expansion of the Graphic Design program to include L2 and L3 completer courses has allowed Douglas High School to address Objective 5 of the State Plan to "Align Education, Career Training, and Workforce Development to Targeted Opportunities."

Grant funds for the Graphic Design program were used to purchase the following: Dell Laptops - Latitude 14 5000 Series with Microsoft Office License and Adobe License; and an Apple Laptop Macbook Pro 15" for instructor use.

# **Program Improvement:**

Program improvements were made at Douglas High School and George Whittell High School. One of the key elements to any CTE program is that facilities, equipment, instructional materials and supplies comply with health and safety standards and simulate current and emerging technologies, and are of sufficient quantity and quality to meet the needs of students.

Grant funds received for this project were used to improve and upgrade equipment for the following schools:

George Whittell High School – Culinary Arts – Kitchen equipment upgrades. The demonstration tables and prep tables at Whittell High School were in dire need of replacement and were over twenty years old. The equipment purchased will allow students to learn on industry-standard equipment and will provide for a safer learning environment.

Douglas High School – Welding Technology – Welder upgrade. A welder at DHS was replaced due to being very old and had outlived its service. This presented a very unsafe work area and put students at risk when attempting to use it. Multiple attempts were made to repair this welder, but it was past the point of no return. The funds received allowed for the replacement of this welder.

Grant funding has been provided to improve the following areas:

- Standards and Instruction
- Practical Application of Occupational Skills
- Programs Leading to a National Credential or Certification

Grant funds requested would allow these programs to operate with safe and reliable equipment. Douglas High School's Welding Technology program could see improved completion rates because students would have the proper tools to complete their tasks. George Whittell High School has a completer course in Culinary Arts. However, due to enrollment, this program of study alternates every other year. Steps have been taken to completely upgrade facilities and equipment into a state of the art culinary kitchen.

Grant funds requested have been used at Douglas High School and George Whittell High School. According to the 2014-2015 District Accountability Report, Douglas County School District provides educational opportunities to the following special populations: Students with disabilities (IEP) = 14.17%, English Language Learners (ELL) = 5.43%, and 24.21% of students at DHS and 23.79% of students at GWHS participate in the Free and Reduced Lunch (FRL) program. Accommodations have been made in classrooms and lab areas so that students with disabilities have access to all equipment and tools necessary to perform the required tasks. A Personalized Education Plan (PEP) is written for those students that are on an IEP or 504. By upgrading the equipment and programs at Douglas High School and Whittell High School, it will strengthen the embedded goal of these programs to provide students of any socioeconomic status or physical ability the chance to gain leadership skills and become eligible for state certification and CTE College Credit, and ultimately enroll into college and become productive citizens.

#### **Overall Description of the Round Two Project:**

#### PROGRAM EXPANSION: PLTW Biomedical Science

• A full description of the program expansion, including the course sequences, numbers of students served, and student outcomes.

DHS - Funding was provided to maintain the current instructor for the 2015-16 school year to continue teaching PLTW Principles of Biomedical Sciences (PBS) course and a new second year course, PLTW Human Body Systems (HBS), that will be taught this fall 2015. Along with the instructor funding, funds were provided to support the PBS and HBS courses as well as the expansion to the third year Medical Interventions (MI) course. This instructor is critical to the continued development and expansion of the DHS PLTW Biomedical Science course sequence. Enrollment in the PLTW PBS has been steady the past two years and for the 2015-16 school year with three full sections. Enrollment in HBS course is positive for the first year with one full section. Additionally, the PLTW Medical Interventions (MI) course will be added as a third year course (2016-2017) and Biomedical Innovation (BI) will be added as the capstone course for PLTW Biomedical Science students, thus providing an opportunity for students to complete their pathway. Beginning with the 2016-17 school year, Douglas County School District will fully fund the Biomedical Sciences teacher in order to sustain the program and course sequence and to increase student participation throughout the sequence including program completion.

GWHS – Whittell has a Health Sciences I course in place for the 2015-16 school year. The goal was to duplicate the PLTW Biomedical Sciences sequence at Whittell High School in order to provide additional CTE courses to the student population, build opportunities for students to earn State Certificate of Skill Attainment after their third year, and to ultimately increase CTE program completion rates. In preparation for this school year, a teacher was provided training during the summer of 2015 in the PLTW Biomedical Sciences courses. This same teacher will also be receiving training in the summer of 2016 for the second year Human Body Systems course. This follows the same introductory sequence used at Douglas High School where the Health Sciences I and II courses were offered and students were then transitioned over to the PLTW Biomedical Science pathway.

#### **Course Sequencing (\* shows anticipated year of implementation):**

Year	DHS	GWHS
2013-2014	PLTW-PBS	-
2014-2015	PLTW-PBS	-
2015-2016	PLTW-HBS	PLTW-PBS
2016-2017	PLTW-MI	PLTW-HBS*
2017-2018	PLTW-BI*	PLTW-MI*
2018-2019	-	PLTW-BI*

# **DHS Enrollment (\* shows projected numbers)**

Year	PLTW-PBS	PLTW-HBS	PLTW-MI	PLTW-BI
2013-2014	93	Not Applicable	Not Applicable	Not Applicable
2014-2015	101	Not Applicable	Not Applicable	Not Applicable
2015-2016	91	24	Not Applicable	Not Applicable
2016-2017	75	45	13	Not Applicable
2017-2018	150*	100*	100*	24*
2018-2019	200*	150*	150*	100*

#### **GWHS Enrollment (\* shows projected numbers)**

Year	PLTW-PBS	PLTW-HBS	PLTW-MI	PLTW-BI
2015-2016	20	Not Applicable	Not Applicable	Not Applicable
2016-2017	30*	20*	Not Applicable	Not Applicable
2017-2018	30*	20*	10*	Not Applicable
2018-2019	30*	20*	10*	5*

#### **Student Outcomes**

Every Level 3 student in the CTE program in Douglas County School District will take the CTE Workplace Readiness Skills Assessment and the End of Course Assessment. The PLTW Biomedical Science program at DHS had its first group of completer level students take these assessments in the 2015-16 school year. Current enrollment figures indicate that there will be 13 students eligible to take the end of course exams in the Engineering program of study. All Level 3 students will participate with the opportunity to earn the Certificate of Skill Attainment and become eligible for CTE College Credit.

# Describe how the program expansion will lead to improved program completion rates.

Douglas High School - The expansion of the Health Sciences program to the PLTW Biomedical Science program of study provided a clear pathway for students to complete a course sequence across a three or four year enrollment. The second course in the PLTW sequence, Human Body Systems (HBS), was added in the 15-16 school year. This now provides students with the building block coursework that will take them to Medical Interventions (MI) in year three ('16-'17) and to the Biomedical Interventions (BI) course as the capstone in year four ('17-'18). The instructor is committed to receiving ongoing training necessary to provide years three and four course work. Increasing course enrollments and the need for additional sections have required the Douglas High School administration, along with the district CTE Coordinator and central office directors, to identify at least one more individual who can be trained to teach one or more courses in this sequence. This will provide students with the ability to complete the program of study (complete sequence) and earn the State Certificate of Skill Attainment.

George Whittell High School – Funding from this grant has provided students at GWHS the ability to transition from the current Health Sciences program into the PLTW Biomedical Science pathway. The first year course, Principles of Biomedical Science (PBS) was offered in the 2015-16 school year. It is anticipated that the Year 2 course Human Body Systems (HBS) will be offered in the beginning in 2016-17. The site administration and teacher are committed to additional training over the next few years in order to build the Biomedical Science sequence. This will provide students with the ability to complete the program of study (complete sequence) and earn the State Certificate of Skill Attainment

# Describe how the program expansion supports economic- and workforce-development priorities.

Nevada is in need of individuals to fill a variety of healthcare occupations. The 'Nevada's Top 100 Demand Occupations' published by the Nevada Department of Employment Training and Rehabilitation (DETR) shows occupation openings for occupations needing either an Associate Degree, other formal education, or a Bachelor Degree or higher. For occupations requiring a Bachelor Degree or higher Medical and Health Services Managers, Physical Therapists, Physician Assistants, and Dentists are all in the top 18 of Total Annual Openings. For occupations requiring an Associate Degree or other formal education the need is more distinct. Of the top 12 of Total Annual Openings, Registered Nurse, Nursing Assistants, Medical Assistants, and Licensed Practical and Licensed Vocational Nurses are ranked 1, 3, 4, and 6 respectively with Dental Hygienists positioned at 10. For positions requiring short term on-the-job training or moderate to long term on-the-job training, Home Health Aides and Medical Secretaries are needed. Clearly there is a huge need for these occupations throughout the state and region. DETR's Labor Market and Economic Fact Sheet for June 2015 shows that education and health services jobs are up 5,300 positions as part of broad-based growth in multiple sectors. Annual openings due to growth (projected) for each of these occupations shows steady growth and demand as projected for the next seven years. This data is consistent with prior projections from the Governor's Workforce Investment Board (GWIB) Healthcare and Medical Services Sector Council who identified 'In-demand Occupations' (1/16/2014). A list of 35 occupations leading off with the 5 occupations listed in the above-mentioned

'Top 100 Demand Occupations' (top 8 listed). Students currently in high school and taking a Biomedical course sequence through completion will have a background and solid basis to be able to either enter the job market with additional training, or attend a two year or four year (or more) program of study that will enable them to pursue one of these occupations.

Douglas County benefits extensively from the services and supports that the Carson Valley Medical Center, Minden Medical Center (Carson Tahoe), and assorted senior living facilities provide to the community. Healthcare is scheduled to be of increasing importance to the Carson Valley as our population continues to age and potentially draw additional retirees to the region. We are fortunate to have Western Nevada College and the University of Nevada Reno as two local educational institutions that provide academic programs in Nursing (WNC & UNR) as well as a variety of health sciences degrees (UNR) covering four year and beyond education. With the strength in occupational need in health services coupled with WNC and UNR's academic programs the likelihood of training and retaining students in the region (and hopefully Valley!) is very high.

# Funds from the State CTE Competitive Fund were expended in the following ways:

- One year continued funding to maintain the Biomedical Sciences teacher at Douglas High School. Individual will teach 4 sections of Biomedical Sciences (3 POBS, 1 HBS) during the 2015-16 school year. Beginning with the 2016-17 school year the Douglas County School District will fully fund and sustain the position.
- Compensation for two teachers to attend the annual PLTW conference for the Biomedical Science program sequence. Compensation is for 1 non-contract travel day. Conference will occur during the 2015-16 school year March 20-23, 2016 Indianapolis, IN.
- Compensation for two teachers to attend a summer two-week mandatory training through Project Lead the Way to be able to teach the next Biomedical course (Medical Interventions) and to train an additional teacher to teach a Human Body Systems section in Fall 2016. Training will occur in June 2016 - dates and locations have not been identified by PLTW at this time. Includes training for GWHS Teacher in Principles of Biomedical Science - 1st course and Human Body Systems -2nd course for 2016-17.
- Registration and Transportation were provided for the Biomedical Science teachers to attend a summer two-week mandatory training listed above.
- Funding for general supplies for the Principles of Biomedical Science and Human Body Systems courses were provided for startup materials, supplies and equipment in order to teach the PLTW Biomedical Science course sequence. All items are on the PLTW Biomedical Science Core class lab equipment list such as but not limited to the following: ANATOMY IN CLAY® Learning System, WARD'S Sherlock Bones: Identification Lab, Human Eye Model, Carolina<sup>TM</sup> Visual Perception Kit, Broken Bones X-rays, Linking Cubes, Bone, Ground Preparation (cs) Microscope Slide, Muscle Types Slide Set, Bone, Cancellous (cs) h & e Microscope Slide, Adult Skin, Pigmented (sect) Microscope Slide h & e, Histology Slide Set, 125mL Erlenmeyer flasks, Acetone, Disposable bacterial filters, Nose clips, Disposable mouthpiece for Vernier Spirometer, ATP Muscle Kit, DNA Detectives Module, DNA Fingerprinting II, Simulating Urinalysis Lab, Simulated ABO and Rh Blood Typing Lab, Cow Long Bone for Dissection, Cow Eye for Dissection, Pig Kidneys, Simulated ABO and Rh lab activity, Percussion (reflex hammer) 12" Goniometer, plastic storage boxes, and other expendable and startup lab supplies.
- Funding for lab equipment for the Biomedical Science courses were provided to purchase items such as Digishaker Shaking Water Bath 120V, Stirplate Isotemp, Microscope Binocular head, Power Supply for 4 electrophoresis tanks, Microcentrifuge fixed angle, M12 Dual Electrophoresis Apparatus, LabQuest Mini PLTW, Classroom micropipet 20-200 ul, Electronic balance variable modes, Centrifuge benchtop, Blue View Transilluminator for electrophoresis gels, Redi-Tip pipet tips, and Vernier Bundles.
- Dell laptops, laptop charging cart, and printers and scanners were purchased for classroom and lab use.

#### PROGRAM EXPANSION: PLTW Engineering

The expansion of the PLTW Engineering program at Douglas High School included the addition of the Year 3 Computer Integrated Manufacturing course. Curriculum for this course was purchased and implemented by the beginning of the 15-16 fall semester. Startup supplies and equipment were acquired and in place prior to the start of the semester. These include consumable items such as Height Offset Sensor, hook-up wire, compressor fittings and hoses, end fittings, etc.; a classroom set of Dell laptops and a charging cart were purchased to allow students access to course work; and larger, stationary items such as the Haas Toolroom Mill were purchased to provide students real-world, hands-on industry level training. The Instructor attended a two-week training in order to teach the PLTW Computer Integrated Manufacturing in Fall 2015 (Completed June 2015) and is planning on attending additional training across the next two summers (Summer of 2016 and Summer of 2017) in order to receive training to teach another course in the PLTW Engineering sequence.

# **Course Sequencing:**

- Year 1 Introduction to Engineering Design (FY14)
- Year 2 Principles of Engineering (FY15)
- Year 3 Computer Integrated Manufacturing (FY16)

# **Enrollment (\* shows projected numbers)**

Year	PLTW – IED	PLTW – POE	PLTW – CIM	Possible 4th year or add'l 3rd
				year
2013-2014	22	Not Applicable	Not Applicable	Not Applicable
2014-2015	71	17	Not Applicable	Not Applicable
2015-2016	102	22	2	Not Applicable
2016-2017	77	48	12	Not Applicable
2017-2018	160*	100*	100*	25*

#### **Student Outcomes**

Every Level 3 student in the CTE program in Douglas County School District will take the CTE Workplace Readiness Skills Assessment and the End of Course Assessment. The PLTW Engineering program had two students that were in the Level 3 Computer Integrated Manufacturing course during the 15-16 school year. Both students participated in both exams and passed each assessment. One student was eligible for CTE College Credit while the other was not due to insufficient GPA. Current enrollment figures indicate that there will be 12 students eligible to take to end-of-course exams in the Engineering program of study. All Level 3 students will participate with the opportunity to earn the Certificate of Skill Attainment and become eligible for CTE College Credit.

# Describe how the program expansion will lead to improved program completion rates.

The expansion of the Engineering program has provided a clear pathway for students to complete a course sequence across a three or four year enrollment. The addition in 2015-16 of the third course in the sequence (Computer Integrated Manufacturing) now provides students with the building block coursework that will potentially take them to additional specialization courses in Aerospace Engineering, Computer Science and Software Engineering, and the capstone course in Engineering Design and Development. The instructors are committed to receiving the training necessary to provide the additional courses and there is interest among DHS staff in receiving training to provide additional sections in this course sequence. With increasing course enrollments and the need for additional sections, the Douglas High School administration along with the district CTE Coordinator and central office directors will need to identify at least one more individual who can be trained to teach one or more courses in this sequence.

# Describe how the program expansion supports economic- and workforce-development priorities.

As part of the vertically aligned recruitment strategy, Douglas County School District has begun the PLTW Gateway program in the two valley middle schools. The Gateway program provides middle school students with an opportunity to explore engineering and biomedical science curriculum. DCSD will begin

with the two foundation units (Design & Modeling; Automation & Robotics) in 2015-16 and then offer selected specialization units including Science of Technology, Flight & Space, and Energy & the Environment in 2016-17 which is the precursor to the PLTW Engineering courses in high school. Additional exploration within the STEM offerings, specifically engineering, will provide students with the background to make course decisions once they reach high school.

Nevada is in need of individuals to fill a variety of healthcare, engineering, and computer-based occupations. The 'Nevada's Top 100 Demand Occupations' published by the Nevada Department of Employment Training and Rehabilitation (DETR) shows occupation openings for occupations needing either an Associate Degree, other formal education, or a Bachelor Degree or higher. For occupations requiring a Bachelor Degree or higher, Civil Engineers, Computer Systems Analysts, and Network and Computer Systems Administrators are all in the top 18 of Total Annual Openings. For occupations requiring an Associate Degree or other formal education the need is more distinct. Of the top 12 of Total Annual Openings, Computer User Support Specialists, A/V Equipment Technicians, and Aircraft Mechanics and Service Technicians are ranked 7, 11, and 12 respectively. Clearly there is a huge need for these occupations throughout the state and region. DETR's Labor Market and Economic Fact Sheet for June 2015 show that trade/transportation/utilities are up 7,200 jobs as part of broad-based growth in multiple sectors. Annual openings due to growth (projected) for each of these occupations shows steady growth and demand as projected for the next seven years. Students currently in high school and taking an Engineering course sequence through completion will have a background and solid basis to be able to either enter the job market with additional training, or attend a two year or four year (or more) program of study that will enable them to pursue one of these occupations.

Douglas County continues to attract technical firms to the area to complement General Electric, Bently Nevada, Google (new), and other companies in and around the industrial park. We are fortunate to have Western Nevada College and the University of Nevada Reno as two local educational institutions that provide academic programs in Engineering and Computer Sciences as well as a variety of degrees (UNR) covering four year and beyond education. With the strength in occupational need in engineering and computer science coupled with WNC and UNR's academic programs the likelihood of training and retaining students in the region (and hopefully Valley!) is very high.

# Funds from the State CTE Competitive Fund were expended in the following ways:

- One year one period per day funding to implement the Computer Integrated Manufacturing (CIM) course at Douglas High School during the 2015-16 school year. This teacher works through his preparation time period (per negotiated agreement) to teach the CIM course. The cost of the preparation period is 1/6 of his salary. Beginning with the 2016-17 school year the Douglas County School District will fully fund and sustain the position without having to use preparation periods.
- Compensation will be provided for the CIM teacher to attend the annual PLTW National Symposium for all program areas. Compensation is for one non-contract travel day.
   Conference will occur in during the 2015-16 school year - March 20-23, 2016 - Indianapolis, IN
- Compensation was provided for the CIM teacher to attend a summer two-week mandatory training through Project Lead The Way to be able to teach the next Engineering sequence course (Aerospace, Computer Science and Software Engineering, Engineering Design and Development). Training will occur in June 2016 - dates and locations have not been identified by PLTW at this time.
- Registration and Transportation were provided for the CIM teacher to attend a summer twoweek mandatory training listed above.
- Funding for general supplies for the CIM course were provided for startup materials, supplies and equipment in order to teach the PLTW Engineering CIM Course sequence. All items are on the PLTW Engineering Core class lab equipment list. All items below \$100 1X purchase; individual items will include but not be limited to: cordless drill, HSS drills, compact digital scale, quick grip bar clamp (various), spring clamps, drill press vice, digital

multimeter, miter box, dial calipers, soldering iron, storage cabinet, drill press bench top model, socket set, screwdriver, band saw bench top model, tools (hammer, square, wrenches, etc.).

- Funding for lab equipment for the CIM course were provided to purchase items such as Ultimaker filament for 3-D printer (540 lbs. x \$12/lb.), VEX CIM/POE kits, Lynxmotion PLTW Robotic Arm Kit (serial), 10 inch benchtop table saw, and Portable Compressor 5 gal tank.
- Dell laptops, laptop charging cart, and printers and scanners were purchased for classroom and lab use.
- Funding was provided for a Haas Toolroom Mill with CT-style Tool Changer Grippers, transformer for 380-480V operation, tooling = 24 pull studs, 10 station automatic tool changer, programming system, 15 gallon flood coolant system. Entry level CNC for Computer Integrated Manufacturing (CIM) course. Full VMC capabilities, fully enclosed, LCD monitor, & USB port. HAAS is partner with PLTW. The Haas mills are the industry standard for compact machining centers. They are perfect for schools, start-up shops, or as a first step into CNC machining. Loaded with full-size features, common to equipment found industry wide. The control system promotes the use and knowledge of G and M coding but readily accept outside files from CAD/CAM software. Manufacturer's support is nearby in Oxnard, CA and use a control system that is one of the most common in that industry. Students trained to use this equipment would find expanded employment and accelerated future education and training opportunities.

# PROGRAM IMPROVEMENT - Automotive Technology

Funds from this grant were used to expand the current Automotive Technology program to include a level 3 completer course. Prior to this grant, the Automotive Technology program served approximately 75 students in Automotive Technology I and 25 students in Automotive Technology II. With the addition of the freshman class in the fall of 2015, it was anticipated that there would be a greater need for additional sections in Automotive Technology, specifically a Level 3 course. Adding Automotive Technology III has provided students with a higher level of learning and more rigorous training. It also serves to promote Automotive Technology as a CTE completer course. Juniors and seniors now have the opportunity to participate in Workplace Readiness Skills and End of Program assessments. Successful students will be eligible to earn the Certificate of Skill Attainment in Automotive Technology and potentially earn CTE College Credit. Additionally, students that are not headed for college immediately will be better trained for entry-level positions in the community.

# Describe the areas (listed above) for which funds were expended

#### **Standards and Instruction**

Because the Automotive Technology program at Douglas High School did not have a Level 3 completer course, there were no students eligible to receive the state Certificate of Skill Attainment or CTE College Credit. Now that the Automotive Technology III course was added in the fall of 2015-2016, there are 10 students enrolled in the first year of execution. Enrollment for the 2016-2017 school year show that there are four sections of Automotive Technology I (102 students), one section of Automotive Technology II (23 students) and one section of Automotive Technology III (15 students). The freshmen class was brought back to the high school (fall of 2015) and has added a significant number of students to the Automotive Technology I classes. This will strengthen the program creating a greater need for more sections in all three levels and will generate a larger population of completers.

#### Facilities, Equipment, and Materials

Funding from this grant allowed for the purchase of the following equipment and course work:

- V5 Variable Displacement A/C Compressor Cutaway
- Automotive Service Excellence ASE Test Prep DVD Set
- OBD-II 5 CD Package
- Basic Electricity Courseware
- Suspension and Steering System/Courseware
- Air Conditioning w/Automatic Climate Control Trainer 134-A/Courseware

#### Programs Leading to a National Credential or Certification

All courses in the Automotive Technology program at Douglas High School are aligned with the Nevada State CTE Standards for Automotive Technology. Through strict adherence to these standards, students are taught a rigorous curriculum that, when completed, makes them eligible candidates for the Automotive Mechanics program at Western Nevada College. Douglas High School and WNC currently have an articulation agreement that allows students to earn college credit for the Automotive Technology I course if taken as juniors at DHS. However, due to new CTE College Credit policy, DHS students cannot earn college credit at this time as there is no completer level course. With the addition of the Automotive Technology III completer course, this has created a greater opportunity for students to take end of program assessments, and become eligible for CTE College Credit. Students can also earn the state Certificate of Skill Attainment and Workplace Readiness Skills Certificate. Students can then enroll in the Automotive Mechanics program at WNC. Students enrolling in this program will then be eligible to become Auto Service Excellence (ASE) certified.

#### Describe students served and other outcomes, as identified in the grant application.

Grant funds requested have been used specifically at Douglas High School. There are no other Automotive Technology programs in our district. Douglas High School provides educational opportunities to the following special populations: Students with disabilities (IEP) = 12.08%, English Language Learners (ELL) = < 1%, and 23.8% of students at DHS participate in the Free and Reduced Lunch (FRL) program. The Automotive Technology program provides students of all abilities and status an opportunity to succeed. Currently, the Automotive Technology program has a physically disabled (wheelchair) student. Accommodations have been made in the classroom and in the shop so that this student has access to all equipment and tools necessary to perform the required tasks. This student has enrolled into the Automotive Technology III class for this school year and will more than likely continue into postsecondary automotive technology training. By adding a Level 3 completer course, it has provided students of any socioeconomic status or physical ability the chance to become eligible for state certification and CTE College Credit, and ultimately enroll into college and become productive citizens.

#### PROGRAM IMPROVEMENT - Graphic Design

Funds from this grant were used to expand the current Graphic Design program to include Level 2 and Level 3 completer courses. Prior to this grant, the Graphic Design program was primarily Screen Printing. In the 2014-2015 school year, Douglas County School District decided to change from Screen Printing to the Graphic Design program of study so that it would align better with state standards and eventually lead to a completer program of study. Grant funds for this project were used to purchase eight (8) new laptops to be used in conjunction with the Graphic Design L2 and L3 improvement. The purpose for this project is to expand the current Graphic Design program to include a Level 2 intermediate course and a Level 3 completer course. With the addition of the freshman class in the fall of 2015 there is a greater need for additional sections in Graphic Design, specifically L3 course work. This project has provided students with a higher level of learning and to promote Graphic Design III as a CTE completer course. Juniors and seniors now have the opportunity to participate in Workplace Readiness Skills and End of Program assessments. Successful students will be eligible to earn the Certificate of Skill Attainment in Graphic Design and potentially earn CTE College Credit. Additionally, students that are not headed for college immediately will be better trained for entry-level positions in the community.

#### Describe the areas (listed above) for which funds were expended

#### **Standards and Instruction**

Prior to this grant, the Graphic Design program at Douglas High School did not have a Level 3 completer course and there were no students eligible to receive the state Certificate of Skills Attainment or CTE College Credit. Now that the Graphic Design II and III courses have been added in the fall of 2015-2016, there are 10 students enrolled in the first year of Graphic Design III. Results for the very first state assessments were low as many of the students taking the exams were not fully vested in the importance of the exams. One student passed both exams and was eligible for CTE College Credit. Enrollment for the 2016-2017 school year indicates that there are three sections of Graphic Design I (85 students), two sections of Graphic Design II (49 students) and two sections of Graphic Design III (4 students). With the freshmen class added back to the high school this past fall, it has added a significant number of students to the Graphic Design I classes. This will strengthen the program creating a greater need for more sections in all three levels and will generate a larger population of completers.

#### Facilities, Equipment, and Materials

Funding from this grant allowed for the purchase of the following equipment and course work:

- 6 ea. Dell Laptops, Latitude 14 5000 Series
- 6 ea. Microsoft Office License
- 6 ea. Adobe License
- Apple Laptop Macbook Pro 15"

# **Programs Leading to a National Credential or Certification**

All courses in the Graphic Design program at Douglas High School are aligned with the Nevada State CTE Standards for Graphic Design. Through strict adherence to these standards, students are taught a rigorous curriculum that when completed, makes them eligible candidates for the Graphic Communication programs at any of the following schools: College of Southern Nevada, Great Basin College, Nevada State College, Truckee Meadows Community College, University of Nevada, Las Vegas, University of Nevada, Reno, or Western Nevada College (WNC). Douglas High School and WNC currently have an articulation agreement that allows students to earn college credit for the Graphic Communication course if taken as a junior at DHS. With the addition of the Graphic Design II and III completer courses, this has created a greater opportunity for students to take end of program assessments, and become eligible for CTE College Credit. Students can also earn the state Certificate of Skill Attainment and Workplace Readiness Skills Certificate. Students can then enroll in the Graphic Communication program at WNC.

#### Describe students served and other outcomes, as identified in the grant application.

Grant funds requested would be used specifically at Douglas High School. There are no other Graphic Design programs in our district. Douglas High School provides educational opportunities to the following special populations: Students with disabilities (IEP) = 12.08%, English Language Learners (ELL) = < 1%, and 23.8% of students at DHS participate in the Free and Reduced Lunch (FRL) program. The Graphic Design program provides students of all abilities and status an opportunity to succeed. Having added a Level 3 completer course, it has strengthened the embedded goal of this program to provide students of any socioeconomic status or physical ability the chance to become eligible for state certification and CTE College Credit, and ultimately enroll into college and become productive citizens

# **Elko County School District**

Funding Awarded: \$106,000.00
 Funding Expended: \$104,644.00

# **New Programs**

Elko County School District was able to add Food Science Technology to the list of completion classes for the Agriculture and Natural Resources pathway through this grant. This is an LC3 course stemming from the sequence of Agriculture Science I and II that were already in place at Wells HS. In the 2015-16 academic year, Wells HS had four students receive certificates for Food Science Technology, a 100% passing rate. Currently, twelve students are enrolled in the program for a 300% increase in participation. This program was co-sponsored by ECSD to complete the infrastructure of the laboratory area to meet State and Local Health codes. The lab area is fully functional for the 2016-17 school year. The funds were used with this Grant program to provide contracted services for plumbing, electrical, HVAC, and construction costs associated with modifying the existing structure to meet State and County codes for a Food Service area.

# **Lander County School District**

Round One Amount Awarded: \$25,000.00

Round One Amount Expended: \$24,484.47

Round Two Amount Awarded \$33,231.00

❖ Round Two Amount Expended \$24,484.47

# **New Programs**

Of the amount awarded (\$25,000), \$24,484.47 was spent. This money was spent to create a new agricultural education program based around a new greenhouse. About 40 students were served in the initial year but that number will grow with every year that passes. The monies were used to purchase equipment and supplies for the greenhouse. These items included things such as shelves, a cooling system, vents, pots, and a hydroponic system. This will lead to improved program completion rates because it now enables us to prepare students with the base courses that lead to the program completer – Greenhouse Management. This program supports economic development because of our partnership with the Bureau of Land Management (BLM). Students will work with the BLM employees to learn all facets of plant growth and to become acquainted with workforce skills they can acquire as careers. Funds were expended as mentioned above in order to accommodate the new program completer course – Greenhouse Management.

#### **Program Expansion**

Of the amount awarded (\$33,321), \$33,315 was spent. This money was spent for the expansion of our Ag. Mechanics program. About 45 students were affected in this expanded program. This number will increase as the program continues to be built/expanded. The purchases included equipment and supplies such as a plasma cutter, vertical bandsaw, 20 laptops with the cart and storage as well as charging supplies. This leads to program completion by allowing us to build depth to our existing program such that students can proceed through Ag. Mech. I, to Ag. Mech. II, and finally to Ag. Mech. III as a program completer. This program supports economic development because of our local business partnerships and the skills students gain that can lead to employment locally in the mines. The skills they learn in the classroom transfer directly to the skills needed in the workplace.

# **Program Improvement**

No grant funds were used for program improvement.

#### **Lincoln County School District**

Round One Amount Awarded: \$5,260.00

Round One Amount Expended: \$5,258.93

\* Round Two Amount Awarded \$17,530.00

Round Two Amount Expended \$17,530.00

# **Overall Description of the Project:**

Lincoln County School District expanded their agriculture and natural resources programs at Lincoln County and Pahranagat Valley High Schools by purchasing supplies and equipment for the greenhouse and for animal handling.

#### **Program Improvement:**

For the Round 1 CTE Competitive Grant, items purchased were used to improve programs already in place. Animal handling supplies were purchased for LCHS such as: animal scale, blower, grooming chute, and shears. These items have enabled students to have a more hands-on experience with immediate instruction in regards to preparing animals for showing at fairs and other venues. In addition Greenhouse supplies were purchased for use at PVHS to improve student involvement in greenhouse production.

For the Round 2 CTE Competitive Grant, staff travel was funded for CASE Intro to AFNR as well as more greenhouse supplies to include a greenhouse climate control system, floral cooler, and Ag Science/Leadership textbooks. The purchase of all of these items will help students to learn to properly utilize a greenhouse, and the textbooks will aid students in preparing them for competitions and conventions while in high school as well as college and workplace.

#### **Lyon County School District**

❖ Round One Amount Awarded: \$109,436.00

❖ Round One Amount Expended: \$25,251.45

Round Two Amount Awarded \$40,194.00

Round Two Amount Expended \$3,278.18

# **New Programs**

No grant funds were used for new programs.

#### **Program Expansion**

No grant funds were used for expansion of programs.

# **Program Improvement**

Funds expended were used to improve programs, providing professional development for multiple teaching staff members and additional industry standard equipment. The attended professional developments were as follows:

National Association of Agricultural Educators (NAAE) Regional & National conferences provide Agriculture Educators; an understanding of the Quality Program Standards Self-Assessment, program standards, networking opportunities with agricultural educators from around the nation, sessions that expose teachers to new and innovative curriculums and classroom tools that will help with the quality of classroom instruction.

The agriculture teacher at Smith Valley School holds an office for the (Western) Region 1 National Association of Agricultural Educators where she participates in planning future agriculture classes and student success. While serving on this committee, it will help her with self-assessment as a CTSO Advisor (QPS 3.3). It will also help the students as she will be more effective in teaching leadership skills in her Animal Science class (standard 13.0), her Agriculture Business class (standard 8.0), her Agriculture Science I and Agriculture Science II classes (standard 2.0).

Funding was spent to improve programs in the areas of Qualified and Competent Personnel, Standards and Instruction, and Leadership and Citizen Development. Students served are all Agriculture & Natural Resource students.

Outcomes: Smith Valley School will improve the agriculture program in order to increase the amount of students completing their programs.

- First Year Teacher will attend the National Association of Agricultural Educators National Conference and the National Association of Agricultural Educators Region 1 (Western) Conference in order to learn effective instructional strategies that will help students see the relevance agriculture has to the economic and workforce development priorities in Smith Valley in Animal Science, Natural Resources and Wildlife Management, Agriculture Business.
- 2. Introduce middle school students to agriculture school businesses by having them intern with upper classmen in the 2015-16 school year. Nineteen middle school students are scheduled to enroll in Agriculture Science I for 2016-17.
- 3. Connect Agriculture Business students to industry leaders in the community. As middle school intern students see the value in the relationship between agriculture businesses and industry leaders, they will continue toward their completion by taking Agriculture Science II during their freshmen year, and completer courses during their sophomore, junior or senior years.
- 4. The enrollment of Hispanic and low socioeconomic students will increase by 5%.

BobCAD-CAM - The objective of this course is to become proficient in using the BobCAD-CAM CAD and Mill modules.

Funding was spent to improve programs in the areas of Qualified and Competent Personnel and Standards and Instruction

Students served are all Skilled & Technical Sciences students in Metalworking.

Outcomes: To establish a new Metal Working program as designated in the Nevada CTE Course Catalog. Introduce Students to a general overview of the metalworking processes. Students will be able to use essential tools and machines to safely fabricate. Fabrication will include experience with Welding, Machining, Heat Treating, Woodworking, Forging, and Casting. Students will become familiar with several programs while using CNC Lathe, Mill, Plasma, Router, and Engraver machines. The development of Problem Solving and Self Discovery which readily lends itself to this type of program. Students will develop entry level skills for employment and be prepared for secondary education.

#### **Equipment purchased:**

64" Roland Vinyl/Printer/Cutter

By providing student/school-based enterprise opportunities to our students they learn real world experiences from their instructor in the classroom, through their customers, and business partners. Our students work closely with the business to insure that the items produced meet the needs of the customers, this includes the designing, production and marketing of promotional materials for "Night In The Country", such as banners, social media advertisements, and flyers the annual event. It is impressed upon the students that it is their job to make the customers satisfied and to always practice their workplace readiness skills. We currently have customers that are interested in providing internships to our students, they are impressed with the work they have seen our students produce and they want to encourage and motivate them to continue on the career path they have set for themselves.

Many of our partners such as Nevada Copper, the Boys and Girls Clubs of Mason Valley, Through the Eyes of a Child Foundation, Studio 33 Graphics, Wild West Chevrolet and our PRIDE/Booster organizations have expressed interest in wanting our students to design and produce advertisements for their business needs, and are interested in using our services for their printing of large media. Our current machine print capacity is 30", with the purchase of the 64" machine are able to produce 4' to 5' banners and media to these customers and provide more student/school-based enterprise opportunities for our students.

With the use of the CTE State Competitive Grant funding, we obtained the needed vinyl cutting machine to continue to increase the program development and production of industry recognized products created by the students in the graphic design program at YHS that align directly with the current Nevada state standards and end of program assessments. The financial resources will allow for the purchase of the equipment, supplies and resources needed to implement the program with fidelity. This initiative is designed to expand our program offerings over the next three years. This will align with the new State CTE guidelines.

Funding was spent to improve programs in the areas of Standards and Instruction and Facilities, Equipment, and Materials

Students served are Information & Technology students in Graphic Design.

Outcomes: Enhance the current course curriculum for the three year Graphic Design program at Yerington High School that follows the suggested sequencing structure of the current Nevada CTE Course Catalog, and aligns with the state standards.

#### **Mineral County School District**

❖ Amount Awarded: \$60,137.19
 ❖ Amount Expended: \$40,954.97

#### **Programs Improvement:**

The 2015-2016 State CTE Competitive Grant funds granted were used for the hire of a CTE Administrator and travel for staff development.

That CTE Administrator is responsible for coordinating, with the Grants Manager, all processes associated with the application for, and administration of, grant-related project activities. Essential duties include: coordinate the CTE Community Advisory Committee; monitor the correct course code usage and course names in PowerSchool and Infinite Campus; collaborate with the Grants Manager in the application process; usage of funds and project activities; coordinate with the Grants Manager and Data Manager in the preparation of student data reports and submissions as necessary; facilitate communication with various departments to ensure that all are working towards common goals; participate in appropriate meetings and training opportunities; review, evaluate and approve all software applications; correlate, develop, and facilitate staff development opportunities for CTE teachers to maximize STEM and CTE Program instruction; meet regularly with IT Staff and others to ensure infrastructure and long range planning requirements are met and supported; consistently demonstrate effective problem solving skills.

The administrator monitors CTE student's grades regularly and works with the Intervention Coordinator and teachers to place low performing students in the proper intervention programs.

The administrator worked with the Grants Manager, Principal, Advisory Committee, science teacher and school board to develop and secure the grant for an EMT Program at MCHS which currently has 15 students enrolled in the first year course of Health Sciences I.

The CTE Administrator worked with the Foods & Nutrition teacher offering assistance and guidance in developing a Complete Level III Foods & Nutrition Course and to encourage improvement in all of her classes and FCCLA Program. The administrator and teacher mentored with another FCS teacher in rural Nevada during the 2015- 2016 School Year and intends to continue that mentorship while including the students to form a partnership between the two schools.

The CTE Administrator has developed and facilitates an agreement for students who apply for any CTE Program offered at MCHS. Emphasis is placed on each student and their parent/guardian who is applying to know exactly what each of the CTE Program expectations are so that each student who applies fully realizes the responsibilities they have for the next 3-4 years. The school counselor will also work closely with each CTE Applicant to provide specific career guidance services to ensure that students enroll in CTE Programs that are consistent with their aptitudes and career interests. With that said, no student interested in a CTE Program is turned down, the CTE Administrator and the school counselor monitors

their progress closely. The administration and CTE Administrator of MCHS has made it an expectation of each student to select a CTE Course of Study no later than each student's sophomore year.

The CTE Administrator has ensured that all CTE Construction Technology Students are being taught separately according to Program Levels and in Program Sequence. MCSD needs to provide every opportunity for each student to become proficient at each level of state standard prior to advancing to the next level. The lower student/teacher ratios will assure proper instruction for credit recovery purposes. Each student is afforded the best opportunities available to be successful CTE completers within the 47 minute class period.

The CTE Administrator has arranged to work directly with Shelly Hartmann, Executive Director, MCEDA and Workforce Development Services to offer Practical Applications of Occupational Skills. MCHS has partnered with the local Economic Development Authority, local businesses and county offices to facilitate MCHS's School to Careers Program that the school board has authorized. Opportunities for other Work-Based Learning will also be coordinated in cooperation with the MCEDA and local businesses including Job Shadowing and Field Trips where students will experience, first-hand, the Employability Skills and work ethic needed to become a successful employee.

During the 2015 -2016 School Year MCHS offered four CTE Programs:

- 1. Administrative Services
- 2. Construction Technology
- 3. Family and Consumer Sciences
- 4. Foods and Nutrition

Forty-one (41) students were served.

To date in the 2016 -2017 school year, sixty-nine (69) students are being served in the CTE Program. That represents 53.5% of our student population. Fourteen (14) completers are expected.

### **Washoe County School District**

❖ Amount Awarded: \$565,448.00❖ Amount Expended: \$563,265.00

# **New Programs:**

WCSD requested and received funds to implement several new programs that will, at their capacity, include full course sequences to the completion levels as outlined in the State CTE Course Catalog. Each of these programs aligned to the economic and workforce development priority need areas identified by the Industry Sector Councils and other relevant economic and workforce development indicators for our region. These programs are described below.

For each new program, the goal of the funding granted to each program was to "increase WCSD Career and Technical Education programs and course offerings in related career fields to ensure Economic Development." The associated objectives were aligned with retention from year-to-year (Objective 1.1); technical achievement upon graduation (Objective 1.2); provision of appropriate instructional materials and resources (Objective 1.3); facility improvements (Objective 1.4). Each of these objectives is summarized here and outcomes are shown individually for each program.

#### Retention

**Outcome 1.1:** At least 50% of students who enter one of the targeted programs as either a freshman or sophomore in SY 2015-16, will enroll in a Level II course associated with the targeted industry pathway for the following year.

#### **Technical Achievement**

**Outcome 1.2:** At least 75% of students completing the targeted programs will earn a Nevada Skills Certificate, indicating competency in the skills and abilities needed to be employable in the targeted industry.

(Note: These results will not be available for three to four years. For the purposes of this report, student technical achievement will be measured by average GPA for first or second year students, indicating their mastery of the technical concepts on the journey to graduation.)

# **Appropriate Instructional Materials & Resources**

**Outcome 1.3:** By the end of the grant period, 100% of materials, equipment, and upgrades will be purchased/completed in the targeted program and classroom.

#### **Facility Improvements**

**Outcome 1.4:** By the end of the grant period, 100% of planned improvements will be completed for the targeted program, classrooms and facilities.

#### **Manufacturing (Sparks High School):**

Nationally, 80% of manufacturers are experiencing shortages in qualified workers which significantly impacts the ability of the U.S. industry to respond to pressure to expand operations. This is especially true in northern Nevada where manufacturing, spurred by the Tesla decision to build a gigafactory in Storey County, is expected to add 55,000 new jobs by 2020 with nearly 60% of these jobs in advanced manufacturing disciplines.

# **Total Funding**

*	Materials & Resources:	\$63,390.00
*	Staffing:	\$63,243.62

#### **Objective 1.1: Retention**

1.	Students Enrolled SY 15/16	15
2.	% of Students Moving to Next Level	33%

#### **Objective 1.2: Technical Achievement**

1.	Students Enrolled SY 15/16	15
2.	Average GPA in CTE SY 15/16	2.5

#### **Objective 1.3: Appropriate Materials & Resources**

1	% of Materials Provided	99%	Computer Tech, Teacher Supplies
2	Teacher Training	99%	SolidWorks, Industry Externship
3	Staff Education	100%	Manufacturing Presentation

#### **Objective 1.4 Facility Improvements**

1 % of Improvement Completed na These funds were revised out of the grant

WCSD did not meet goal 1.1 and 1.2 due to difficulty getting both students and counselors to understand the value of the Manufacturing Technologies program with regard to opportunities and outcomes that can prepare successful students for high-demand, living-wage employment in the region. The 15 students that were enrolled in the Manufacturing 1 class in SY 2015-16 were placed there, rather than choosing the program of study; were relatively unmotivated to successfully perform the tasks and meet the objectives of the course; and, as a result, only five continued on to the next level of the program.

As part of the grant funding, all staff at Sparks High School received information and training about the Manufacturing Technologies program in order to improve understanding and the potential guidance they might provide to students who were considering the program. In SY 2016-17, Sparks was able to offer three sections of Manufacturing I with 50 students enrolled by their own choice.

#### **Computer Science (Damonte Ranch and Hug High Schools):**

Anchored by technology giants such as Apple, IGT, Zappos.com and Microsoft, Nevada has become a key player in digital innovation and information management. In 2015, this job segment represented nearly 60,000 jobs with an anticipated growth rate of approximately 3,000 jobs annually (5.1% growth rate) where STEM skills are required but nearly 2/3 of these new jobs will require less than a baccalaureate degree.

# **Total Funding**

❖ Materials & Resources: \$23,060

#### **Objective 1.1: Retention**

Students Enrolled SY 15/16
 % of Students Moving to Next Level
 202
 21%

#### **Objective 1.2: Technical Achievement**

Students Enrolled SY 15/16
 Average GPA in CTE SY 15/16
 3.39

#### **Objective 1.3: Appropriate Materials & Resources**

1 % of Materials Provided 100% Technology Equipment, Software Licenses, Robots

#### WCSD did not meet goal 1.1 for two reasons:

- Damonte Ranch High School reduced the number of computer literacy courses being offered and encouraged students to choose a Level 1 CTE course to meet the state requirement for computer literacy credit. This resulted in an enrollment of 180 students in Computer Science I with 42 continuing on to the next level. Though many of these students will not move on to complete a program of study, WCSD considers this to be a positive impact on student achievement and workforce development as nearly all career clusters identify an understanding of basic computer programming a necessary skill.
- Hug High School was not able to offer a LevelII Computer Science class in SY 2016-17 due to scheduling conflicts. They currently have 22 students enrolled in Level I and are planning to include a Level II class in the SY 2017-18 schedule.

#### Agriculture & Natural Resources (North Valleys High School):

Agriculture is an economic foundation in Nevada, generating \$100 million in annual exports and billions of dollars in revenue. The diversity of this sector supports jobs on and off farms and has recently shown positive growth trends in food processing and manufacturing that hold great promise for regional and state diversification. The job demand in these areas aligns with skills offered through CTE programming such as greenhouse management, food safety and security, nutrition and agricultural mechanical technologies.

#### **Total Funding**

❖ Materials & Resources: \$72,270

# **Objective 1.1: Retention**

Students Enrolled SY 15/16
 % of Students Moving to Next Level
 43%

#### **Objective 1.2: Technical Achievement**

Students Enrolled SY 15/16
 Average GPA in CTE SY 15/16
 2.5

#### **Objective 1.3: Appropriate Materials & Resources**

1 % of Materials Provided 99% Computers, Auto/Diesel Equipment, Machinery

#### **Objective 1.4 Facility Improvements**

1 % of Improvement Completed 100% Fence Installation for Outdoor Farm

#### Human Development (Academy of Arts, Careers & Technology & Hug High Schools):

This field is broadly defined to include family services, community care for the elderly, social assistance, child/daycare and community/food/housing/emergency relief. All of these occupations seek to improve the quality of life throughout the lifespan from birth to death. During the last recession, this was Nevada's only sector to remain healthy and today, jobs in this sector continue to expand in response to regional growth.

# **Total Funding**

❖ Materials & Resources: \$62,729

#### **Objective 1.1: Retention**

Students Enrolled SY 15/16
 % of Students Moving to Next Level
 61%

#### **Objective 1.2: Technical Achievement**

Students Enrolled SY 15/16
 Average GPA in CTE SY 15/16
 3.37

#### **Objective 1.3: Appropriate Materials & Resources**

1 % of Resource Provided 100% Texts, Computers, Materials

### **Objective 1.4 Facility Improvements**

1 % of Improvement Completed 100% Playground Remodel

#### **Program Expansion:**

Funds may be used to expand programs according to the following criteria: (1) the program currently offers a partial course sequence, but is lacking the completion-level course; (2) the program has current enrollments; and (3) the course sequence must be completed according to the CTE Course Catalog for SY 2015-16. Eligible programs must align to the economic and workforce development priority need areas identified by the Industry Sector Councils and/or other relevant economic and workforce development indicators evidenced by data from regional economic development authorities, the Governor's Office on Economic Development, or other proven, reliable sources. The data source(s) must be cited.

Priority status will be given to those applications that demonstrate the capacity to increase CTE program completion rates.

Allowable uses of funds include planning, curriculum development, equipment and supplies, teacher training, and teacher salaries. The sustainability plan must describe how the program costs will be paid after the funding expires in June 2016.

WCSD requested and received funds to expand several program categories that offered a partial course sequence in SY 2014-15 but lacked the completion-level coursework. Each of these programs had current enrollments and with the addition of advanced levels, had the potential to reach full course sequences as outlined in the State CTE Course Catalog. Each of these programs aligned to the economic and workforce development priority need areas identified by the Industry Sector Councils and other relevant economic and workforce development indicators for our region. These programs are described below.

For each new program, the goal of the funding granted to each program was to "strategically expand WCSD Career and Technical Education programs and course offerings to enable more students to complete a three-year program of study." The associated objectives were aligned with retention from year to year (Objective 2.1); technical achievement upon graduation (Objective 2.2); and provision of

appropriate instructional materials, resources and facility modifications (Objective 2.3). Each of these objectives is summarized here and outcomes are shown individually for each program.

#### Retention

**Outcome 2.1:** At least 50% of students who enter the one of the targeted programs as either a freshman or sophomore in SY 2015-16, will enroll in a Level II or Level III course associated with the targeted pathway for the following year.

#### **Technical Achievement**

**Outcome 2.2:** At least 75% of students completing the targeted programs will earn a Nevada Skills Certificate, indicating competency in the skills and abilities needed to be employable in the targeted industry.

(Note: In some cases, these results will not be available for 1-2 years. For the purposes of this report, where this data is not available, student technical achievement will be measured by average GPA in the CTE program of study, indicating their mastery of the technical concepts on the journey to graduation.)

#### **Appropriate Instructional Materials & Resources**

**Outcome 2.3:** By the end of the grant period, 100% of materials, equipment, and upgrades will be purchased/completed in the targeted program and classroom.

# Building & Construction Trades (Academy for Career Education Charter High School, Galena High School):

While the collapse of the real estate market during the recession resulted in a particularly hard hit to the building trades and construction industry, today growth in this sector has rebounded and is predicted to hit pre-recession numbers by 2017 and continue to add nearly 10,000 jobs annually. While the bulk of the jobs are currently in Clark County, the construction demand in Northern Nevada is being driven by rapid growth in the Tahoe-Reno Industrial Center (Storey County) which is attracting many large companies and adding new jobs. This has spurred demand in the residential market in all adjacent counties where more than 20,000 single-family homes are currently approved for construction.

# **Total Funding**

★ Materials & Resources: \$1	28,354
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#### **Objective 2.1: Retention**

1.	Students Enrolled SY 15/16	109
2.	% of Students Moving to Next Level	57%

#### **Objective 2.2: Technical Achievement**

1.	Students Enrolled in Level 3 in SY 15/16	25
2.	% of Nevada Skills Certificates Earned in SY 15/16	10

#### **Objective 2.3: Appropriate Materials & Resources**

1	% of Materials Provided	100%	Texts, Software, Tools, Equipment, Consumables
2	% of Qualified Staff	100%	Hired: Teacher Assistant and Job Site Project Consultant

#### Engineering (Academy of Arts, Careers & Technology, Galena, & Reed High Schools):

The Brookings Report (released in 2015) identified engineering as one of the top five occupational categories most difficult to fill in Nevada. For jobs requiring a bachelor's degree, this is particularly true in aerospace, civil, electrical and mechanical engineering fields and for jobs requiring less than a four-year degree, jobs include installation, maintenance, repair/electronics/avionics technicians.

#### **Total Funding**

♦ Materials & Resources: \$99,000

#### **Objective 2.1: Retention**

Students Enrolled SY 15/16
 % of Students Moving to Next Level
 59%

# **Objective 2.2: Technical Achievement**

3. Students Enrolled in Level 3 in SY 15/16
4. % of Nevada Skills Certificates Earned in SY 15/16
47

#### **Objective 2.3: Appropriate Materials & Resources**

3 % of Resources Provided 100% Technology, Software, Simulators, Annual Fees, Equipment

#### **Human Services (Wooster High School):**

This field is broadly defined to include family services, community care for the elderly, social assistance, child/daycare and community/ food/ housing/ emergency relief. All of these occupations seek to improve the quality of life throughout the lifespan from birth to death. During the last recession, this was Nevada's only sector to remain healthy and today, jobs in this sector continue to expand in response to regional growth.

#### **Total Funding**

❖ Materials & Resources: \$5,350

#### **Objective 2.1: Retention**

Students Enrolled SY 15/16
 % of Students Moving to Next Level
 15%

#### **Objective 2.2: Technical Achievement**

Students Enrolled in SY 15/16
 Average GPA in CTE SY 15/16
 2.13

#### **Objective 2.3: Appropriate Materials & Resources**

1 % of Resource Provided 100% Textbooks

WCSD did not meet goal 1.1 and 1.2 because Wooster High School continued to use Human Development I as an elective course for students who needed to earn a health credit. Because of this, students were placed in the course (rather than choosing it) and had little motivation to work toward meeting the standards. There was also little interest in continuing to the next course.

In SY 2016-17, Wooster has added the Human Development to the IB Career Program options for students and has increased enrollment in the Level I courses to more than 60 students. They have plans to increase enrollment in the level 2 class from the current seven students to 20 or 25 in SY 2017-18.

#### **Program Improvement**

WCSD requested and received funds to improve existing programs that have current enrollment to the completion level as outlined in the State CTE Course Catalog. Each of these programs aligned to the economic and workforce development priority need areas identified by the Industry Sector Councils and

other relevant economic and workforce development indicators for our region. These programs are described below.

For each program, the goal of the funding granted was to "strategically expand and strengthen WCSD Career and Technical Education programs and course offerings to enable more students complete a three-year program of study." The associated objectives were aligned with retention from year to year (Objective 3.1); technical achievement upon graduation (Objective 3.2); and provision of appropriate instructional materials, resources and facility modifications (Objective 3.3). Each of these objectives is summarized here and outcomes are shown individually for each program.

#### Retention

**Outcome 3.1:** At least 50% of students who enter the one of the targeted programs as either a freshman or sophomore in SY 2015-16, will enroll in a Level II or III course associated with the targeted pathway for the following year.

#### **Technical Achievement**

**Outcome 3.2:** At least 75% of students completing the targeted programs will earn a Nevada Skills Certificate, indicating competency in the skills and abilities needed to be employable in the targeted industry.

#### **Appropriate Instructional Materials & Resources**

**Outcome 3.3:** By the end of the grant period, 100% of materials, equipment, and upgrades will be purchased/completed in the targeted program and classroom.

#### Agriculture & Natural Resources (Academy of Arts, Careers & Technology High School):

Agriculture is an economic foundation in Nevada, generating \$100 million in annual exports and billions of dollars in revenue. This diversity of this sector supports jobs on and off farms and has recently shown positive growth trends in food processing and manufacturing that hold great promise for regional and state diversification. The job demand in these areas aligns with skills offered through CTE programming such as greenhouse management, food safety and security, nutrition and agricultural mechanical technologies.

# **Total Funding**

**	Material	s & Resources:	\$7,065
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#### **Objective 3.1: Retention**

Students Enrolled SY 15/16
 % of Students Moving to Next Level
 64%

#### **Objective 2.2: Technical Achievement**

Students Enrolled in Level 3 in SY 15/16
 % of Nevada Skills Certificates Earned in SY 15/16
 11

#### **Objective 2.3: Appropriate Materials & Resources**

1 % of Resource Provided 100% Computers, Plants/Seeds

# **White Pine County School District**

Round Two Funding Awarded: \$76,531.00
 Round One Funding Expended: \$76,531.00

# **New Programs**

No grant funds were used for new programs.

# **Program Expansion**

No grant funds were used for expansion of programs.

# **Program Improvement**

The funds were expended to purchase and install a greenhouse for the WPHS Agriculture program. There are approximately 28 students served through this program. Students in Agriculture are able to engage in hands-on learning by having this greenhouse and attain mastery on Agricultural Science standards. The facility will encourage more students to complete terminal course offerings in Agricultural Science, thus leading to better transitions from high school to postsecondary.

# **Part III: CTSO Funds**

Career and Technical Student Organization (CTSO) funding was not was not allocated in legislation during this biennium.

# **Part IV: State Allocation Funds**

Of the total funds available, \$7,310,675 was set aside for allocation grants for the purposes described earlier in this report. The table below shows the total amounts requested, the amounts awarded, and the amounts expended by school district.

Descriptions of expenditures and outcomes by each participating school district are shown below and on the following pages.

School District	Amount Awarded	Amount Expended
Carson City	165,476.45	163,280.45
Churchill	115,892.55	102,390.80
Clark	5,176,992.87	4,476,420.61
Douglas	105,464.19	102,825.15
Elko	283,533.38	273,357.07
Eureka	7,181.80	7,181.80
Humboldt	92,084.40	89,604.08
Lander	9,739.70	8,066.60
Lincoln	80,475.47	80,475.47
Lyon	188,891.08	66,153.91
Mineral	8,952.65	7,966.47
Nye	108,218.85	104,960.47
Pershing	14,461.97	.05
Storey*	0	0
Washoe	921,434.29	919,943.07
White Pine	31,875.37	24,706.45
Totals	\$7,310,675.00	6,425,756.19

<sup>\*</sup>Storey County School District does not currently offer CTE programs.

#### **Carson City School District**

Funding Awarded: \$165,476.45
 Funding Expended: \$163,280.45

# Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in eight criteria.

#### **Standards and Instruction:**

Were funds used for standards and instruction? Yes

Funds were used to provide registration fees for four persons to attend the Nevada ACTE conference in July of 2016. Breakout sessions provided professional development, information on state standards and assessments, and curriculum materials. Teachers utilized that information to review and refine their course curriculum. This is in alignment with the work being completed in this area.

# **Leadership Development:**

Were funds used for leadership development? Yes

The Carson City School District considers Career and Technical Student Organizations a significant part of the learning experience of students in the CTE programs. These opportunities help students to develop a deeper understanding of their work in a selected field. These opportunities also build life skills for students. In using the funds in this way, the District has been able to provide these opportunities for students as well as build a continued interest in these programs moving forward.

**HOSA** - Funds were used for registration and travel fees for teachers and students to attend state and national leadership conferences. Five teachers accompanied our HOSA students to the state convention and 94 students attended. (March 2016) Three teachers and 17 students attended the National Leadership Conference held in Nashville during the summer of 2016. Funds were also used to send 15 Pioneer High School students to the state leadership conference.

**Agriculture/FFA** – Funds were used for registration and travel fees for Student Travel costs for teacher and students to attend the State FFA Convention in March (Reno) and National Leadership Conference (Kentucky – November.)

**Business/FBLA** – Funds were used to provide student travel costs for students to attend the state Reno – (May) and National Leadership conferences Atlanta, GA (June, 2016).

**SkillsUSA** – Funds were used to provide student travel for Nevada State Skills USA (Reno) and National Skills USA (Louisville, KY). Our students placed third nationally in the Chapter Display competition. We also had students competing nationally in Collision Repair and Architecture Design.

# **Practical Application of Occupational Skills**

Were funds used for work-based learning opportunities? Yes

The Carson City School District has formed a very strong partnership with the agricultural community of Carson City. This is a unique program, as Carson City is an urban school District, yet has developed a high quality agricultural program within that setting. The program that is in place grows flowers, food, and other products and then uses those to support school and community programs. Due to the nature of the program there is a significant need to provide professional expertise of CTE staff outside of the school day.

Funds were used for certified extra hourly pay for the agriculture teacher to oversee students working at the school greenhouse on weekends and after school hours. The ag teacher supervised agriculture students who were completing SAE hours. The Greenhouse Project is a major partner of the agriculture program. Students planted and cared for the flower baskets that hang in downtown Carson City during the summer. Students also grew and donated over 4000 pounds of fresh produce to local food banks.

#### **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

Carson City School District recognizes the need to develop a high quality work force in order to create the most effective learning environment for students. Professional development for CTE teachers does not always match that of regular classroom teachers. The District has been utilizing Race to the Top funds to provide training around curriculum and assessment development, and that can be done in the district. In order to support the development of staff members' funds were used to send teachers to training opportunities that could not be provided in the District utilizing District expertise.

Funds were used to send two teachers and the CTE administrator to the Green School Conference in Las Vegas. This conference provided opportunities for the agriculture program to partner with elementary programs that are part of the district Sustainable Action Committee. The conference took place at West Career Tech Academy in Las Vegas on October 10.

Funds were used for registration fees and travel for CTE teachers to attend the ACTE/NAAE Conference in New Orleans, November 2015. These individuals also attended the pre-conference workshop on building strong and sustainable business partnerships.

#### **Facilities, Equipment, and Materials**

Were funds used for facilities, equipment, and materials? Yes

State CTE Allocation funds were used for the following:

**Skilled and Technical Sciences:** Replacement supplies and materials for collaborative projects in the Skilled and Technical Sciences area which includes Engineering, Architecture, Collision Repair, and Welding. These items included sandpaper, paint, metal, gas, wood, trim, clips, bolts, screws, rope, string, etc.

**Agriculture**: Replacement supplies including floral supplies, gloves, soil, pots, aprons, fertilizers, starter plants, curriculum packets, soil, pots, rakes, shovels, gloves, clippers, labeling stakes, bedding plants, floriculture supplies, etc.

**Pioneer Health Science**: Items including digital blood pressure monitors, organ and other body part models, infrared thermometers and covers, Universal AED trainer, Casualty simulation kit, digital spirometer, fingertip pulse oximeter, blood pressure kit, ECG monitor, Sys Exam Chart, Human Senses experiment kit, anatomical chart series.

CHS Health Science (includes Health Science, Sports Medicine, EMT, Pharmacy Practice): Items including gloves, first aid supplies, syringes, Band-Aids, gauze, blood pathogen kits, etc.

Culinary Arts: Supplies and materials including produce, meats, pots, pans, utensils, dishes, tablecloths, dishtowels, napkins, juice containers, mixing bowls, dish soap, cleaning materials, baking pans, cutting boards, utensils, replacement restaurant serving dishes, containers, tablecloths, knives, replacement Kitchenaid commercial mixers.

Information and Media Technologies (includes Photography, Graphic Design, Web Design, IT Essentials) programs: including photopaper, resume paper, literature holders, matting material, office supplies, etc.

**Architectural Drafting:** modeling materials, 3D molding materials, glue, tape, etc.

Welding: welding rod, wire brushes, gas, welding cable, metal, strikers, gloves, tips, etc.

**Engineering:** modeling materials, glue, wheels, mats, string, building materials, blocks, notebooks, other supplies and materials as recommended by PLTW.

Collision Repair: paint, sandpaper, primer, hand-tools, aprons, ventilation masks, brushes, tape, etc.

**Health Science – Pioneer:** contract with E-clinical Works for Pioneer students

**Registration fees for CTE Dept.** for CTE Administrator and Partnership Coordinator to attend NNDA, Chamber and Nevada Business Connection meetings. These functions range from \$20 to \$35 per meeting.

#### Career Guidance

Were funds used for career guidance services? Yes

Effective Career and Technical Education programs provide students the opportunity to learn about and access high quality job-related experiences. In order to support students in Carson City the District utilized funds for the following items:

- Resource Materials for CTE Dept. for College and Career Readiness Center including but not limited to job hunting guides, dress for success materials, career exploration information, How to Get a Job Kits, How to Get a Scholarship kits, etc.
- Student transportation for students to visit businesses and colleges throughout the school year
- One specific trip included the opportunity for Welding students to visit Great Basin College in Winnemucca (lodging) and as part of the trip to visit local mining sites in order to gain a deeper understanding of the professional opportunities for welders in the State of Nevada.

## **Program Promotion and Marketing**

Were funds used for program promotion and marketing? Yes

In this area, funds were used to purchase printing for program folders that were handed out to parents and incoming 9th graders. The information contained in these folders provides students and parents essential information about the requirements of the program as well as student opportunities that are found within.

## **Programs Leading to a National Credential or Certification**

Were funds used for programs that lead to national credentials/certifications? Yes

In order to support our EMS and EMT programs, the District utilized allocation funds in the following way:

Certified Extra Hours Pay - Health Science - Extra duty pay weekend hours spent working with students and the Carson City Fire Dept. performing drills for the EMT/ EMS students as well as the RAM medical day on 10/16/15.

## Section 2: Description of Uses of Funds – School Based

#### Carson High School received \$151,873.09.

Over 1700 students at Carson High School were served in nineteen career pathways by these state allocation funds. Supplies and materials were purchased for all programs. This included consumable items such as welding rod, metal, sandpaper, filters, gas, printer ink, 3-D print material, meat, produce, flowers, soil, bedding plants, seed, resume paper, safety glasses, flash drives, memory cards, first-aid materials, gauze, blood pathogen kits, photo matting supplies, modeling glue, and wood. Colorful folders were also printed in order to market and tell the "CTE Story" to community members, businesses and parents.

Equipment was purchased for several programs. This included new kitchen-aid mixers for the culinary program. We also purchased a new washer and dryer for culinary arts which enables us to launder our own towels, aprons and table cloths. Filter systems were purchased for our skilled and technical programs. An industry quality laser engraver was purchased for our IT Media programs. New "smartboard podiums" were purchased for our IT Media programs as pilots. These allow our teachers to be more innovative in their teaching methods and strategies.

Although we did not start new programs with this funding, we did purchase the materials to turn an empty classroom into the "CTE Resource Room" for career-readiness seminars and career information meetings.

Our community partner "New Entrepreneur" club uses this room for their lunch meetings. We purchased posters, banners, magazine/publication racks, white boards, portfolios, resume paper, and office supplies.

Funds were used for our Career and Technical Student Organizations (CTSOs) and advisers to travel to their state and national conventions and competitions. We have four CTSOs in the Carson City School District - FBLA, FFA, HOSA and SkillsUSA. Our chapters are extremely active and both FFA and HOSA are proud of their 100% membership. Just over 200 students attended one of the four state conventions. Several state championships were attained by our students including Architecture Design, Chapter Display, Job Interview, Marketing, Business Plan, and Dental. Thirty-two students attended the national convention and competitions. Our SkillsUSA "Chapter Display" project placed in the top 10 in the nation and our Dental student placed 2nd in the nation. Between our four CTSOs, thousands of hours of community service has been completed.

A large portion of these funds, (\$32,000) allowed us to purchase new work stations for three IT Media labs. The former workstations only allowed 20 students to a lab. The new work stations allow for 25 students in a lab. These new work stations have allowed us to increase enrollment in these programs by 100 students.

Extra duty pay was used to pay our Health Science teachers and Agriculture teacher for labs and work experience projects where students were required to attend. This included the Remote Area Medical (RAM) event that over 100 of our Health Science students helped to coordinate and manage.

Funds were also used to begin building a <u>new CTE website</u> that highlights our programs and partners. This web site is still under construction and will be up and running by the spring. The website will permit students to find and secure mentors, job shadows and internships.

These funds were also utilized for professional development activities. The agriculture science teacher, CTE administrator, CTE partnership coordinator and a middle school teacher attended the Association for Career and Technical Education conference in New Orleans. Two individuals attended the state's "Green Schools" conference.

### Pioneer High School received \$11,407.36.

In school-year 15-16, there were a total of 15 students enrolled in the Health Information Management pathway at our small alternative high school - Pioneer High School. All 15 students in the Health Information Management pathway attended the Nevada State HOSA Convention in Las Vegas. The teacher and students received training from our partner, Physician's Select Management. Through this partnership, our students became proficient on utilizing the eClinical Works health information management system. The teacher was also able to attend a national Health Information Management conference. This has helped to grow the program and our teacher has also been asked to assist other districts in starting their programs.

# Section 3: General Description of Uses of Funds – District Level

All funds were distributed by program area per school. There were no funds allocated for district purposes.

## **Churchill County School District**

❖ Funding Awarded: \$115,892.55
 ❖ Funding Expended: \$102,014.86

## Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in seven criteria.

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

Churchill County High School has a new instructor for the Culinary Arts program. Support for this instructor included visits to Douglas and Carson City school districts to collaborate with instructors on their Culinary Arts programs.

## **Leadership Development**

Were funds used for leadership development? Yes

To support student involvement in CTSOs and to sustain CTSOs with engaged students, travel to state and national conferences was provided for professional development for instructors and competition for students, and adult advisor costs for professional development.

Support for student competitions included FFA Nationals, Fall 2015, Louisville, KY; FCCLA State Leadership Conference, Reno, NV, March 2016, and FCCLA National Conference, Washington, DC, July 2015; Health Science State competition Las Vegas, NV, March 2016 and national convention, Nashville, TN, June 2016; and Nevada SkillsUSA, Reno, NV, April, 2016.

# **Practical Application of Occupational Skills**

Were funds used for work-based learning opportunities? Yes

Support was provided for student job shadow travel. Students attended an employability fair, which was held on the Western Nevada College campus in spring 2016, where they participated in round robin workshops and mock interviews as well as received training on appropriate dress, resume preparation, and other skills.

### **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

All CTE instructors are competent and qualified with the appropriate occupational proficiency. Ongoing professional development is provided to instructors.

CTE instructors and students participated in state and national conferences and competitions:

Ag Mechanics/Ag Science instructors (3) attended the national ACTE conference and the NAAE convention (1) in New Orleans, LA, November 2015. Culinary Arts instructor (1) attended the FCCLA State Conference in Reno, NV, March 2016, and the National Leadership Competition in Washington, DC, July 2015. The Video Production/Photography/Information Technology instructor (1) attended an academy workshop in San Francisco, CA, June 2016, and Technical Skills instructors (5) attended the Nevada Association of SkillsUSA State Leadership and Skills Conference in Reno, NV, April 2016, and the Skills Leadership Industry/College Tours event in fall 2015.

Support for student competitions included FFA Nationals, Fall 2015, Louisville, KY; FCCLA State Leadership Conference, Reno, NV, March 2016, and FCCLA National Conference, Washington, DC, July 2015; Health Science State competition Las Vegas, NV, March 2016 and national convention, Nashville, TN, June 2016; Nevada Skills USA, Reno, NV, April, 2016.

## Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

Approximately 63 percent (63%) of the budget was spent in the support of facilities, equipment and materials in compliance with health and safety standards and in sufficient quantity and quality to meet the needs of the students.

A Hoop House and planter boxes were added to the greenhouse project in the Agriculture Science program (83 students enrolled). A color laser jet printer, scanner, pavilion and computer supplies were added to the Business program (42 students enrolled) to continue implementation of the course. A 49 CU FT freezer, citrus juicer, and a mixer were purchased for the Culinary Arts and Food & Nutrition programs (201 students enrolled) to update existing equipment and to meet industry standards. Delmar's Clinical Medical Assisting textbooks were added to the Health Science program to support employability standards. Dell laptop, video tripods, tools, a Hilti rotating laser kit, Residential Design textbook using Autodesk, CDX Automotive textbook, 3D printer and supplies, Dell precision computers and CDX automotive online three-year site licenses were added to the Technical Skills program.

### Community, Business, and Industry Involvement

Were funds used for community, business, and industry involvement? Yes

Periodic CTE advisory council meetings with business and industry partners in education were held during FY2016. Each CTE department has created a business partnership with various businesses, ranchers and farmers in the community.

#### **Student - Teacher Ratio**

Were funds used for class sizes to ensure effective instruction and safe conditions? Yes

Churchill County High School (CCHS) experienced more growth in the number of students participating in vocational classes than in former years. CCHS was unable to begin any new programs that were formerly on the CTE curriculum; however, the school was able to add a level one course for IT.

Student-teacher ratios in the CTE courses of study were maintained during FY2016. "Class sizes meet the size of the facility and provide safe work stations," concluded in the summary report of the Nevada Department of Education Quality Program Standard Pilot, conducted March 2016.

### Section 2: General Description of Uses of Funds – School Based

No funds were used at the school based level.

## **Section 3: General Description of Uses of Funds – District Level**

No funds were used at the district level.

## **Clark County School District**

Funding Awarded: \$5,176,992.87
 Funding Expended: \$4,476,420.61

## Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in ten criteria.

The Clark County School District (CCSD) distributed state Career and Technical Education (CTE) Allocation grant funds based on each high school's duplicated student enrollment counts as provided by the Nevada Department of Education. CCSD high schools submitted a budget proposal requesting use of funds for program expansion, improvement and support. CCSD provided students with course offerings organized by the Nevada Career and Technical Education Course Catalog 2015-2016 and the CCSD Programs of Study (POS) in the six career cluster areas: Agriculture and Natural Resources; Business and Marketing Education; Education, Hospitality and Human Services; Health Sciences and Public Safety;

Information and Media Technologies; and Skilled and Technical Sciences. State allocation funds were used in support of programs in all six areas.

The Nevada Program Quality Criteria (PQC) were utilized as a guide for identifying program needs. For FY'16, the predominant funding requests were related to improving career guidance, program and instruction, educational personnel, and facilities, equipment and instructional materials and supplies. Career and Technical education in the CCSD was offered in accordance with the Nevada State CTE Course Catalog, including instruction with full integration of state standards.

## **Standards and Instruction**

Were funds used for standards and instruction? Yes

The following new courses were developed in accordance to the Nevada CTE course catalog, in the six career cluster areas: AP Computer Science Principles, Pharmacy Practice Advanced Studies, Foods and Nutrition III, Foods and Nutrition Advanced Studies, Aviation Technology Advanced Studies, Food Science Technology, Manufacturing Technologies I, II, III, Advanced Studies, Manufacturing Technologies II, III Lab, Floriculture Advanced Studies and Greenhouse Management Advanced Studies. Additionally, 33 courses were updated with course title changes and/or standards adjusted.

State Allocation funds were also used to support instruction by:

- Increasing the level of rigor to be taught in select CTE courses by receiving approval for the honors designation. These courses included: Criminal Justice III, Emergency Medical Technician, Forensic Science III, Law Enforcement III, Nursing Assistant, PLTW Biomedical Innovations, PLTW Medical Interventions.
- 2 Providing professional development sessions focused on embedding ELL instructional strategies in CTE courses
- 3 Supporting rigorous curriculum including nationally-recognized programs including Project Lead the Way (PLTW), National Academy Foundation (NAF) and High School of Business (HSB)
- 4 Upgrading computers to run current industry software in Information & Media Technologies programs.

## **Leadership Development**

Were funds used for leadership development? Yes

Funds were provided for CCSD students to attend the Fall Leadership Rally on December 7 at the Cashman Center. Over 600 students from DECA, FBLA, FCCLA and HOSA were supported with transportation and registration costs. 130 CCSD students and advisors from the SkillsUSA chapters were provided charter bus transportation to Great Basin Community College in Elko, Nevada. Attendance at the six CTSO state conferences was supported with funding for transportation, registration and lodging for 1,715 students and 167 advisors. CCSD also supported the attendance of the first place winners and advisors to the DECA International Career Development Conference and HOSA National Conference in Nashville, Tennessee, FBLA National Conference in Atlanta, Georgia, FCCLA National Conference in San Diego, California, and SkillsUSA National Conference in Louisville, Kentucky. Transportation, lodging and registration were funded for 320 participants.

# **Practical Application of Occupational Skills**

Were funds used for work-based learning opportunities? Yes

In conjunction with National Job Shadow Day on Feb 2, 2016, 1,003 CTE students from 17 high schools visited 30 different businesses across Clark County. Students taking their first CTE class in a program of study were encouraged to participate. The goal was to provide them a glimpse into their potential future career so that it would encourage them to continue taking CTE courses, complete a program of study, and graduate from high school.

It also provided students an opportunity to look into different careers within local industries for up to 4 hours. Many students gained a perspective from their experience, and got a true feel for the skills needed for the particular career they are studying in their program of study. It also allowed companies to share information about their industry and allowed students to ask questions, without the pressures of an actual interview or employment.

# **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

CTE sponsored a variety of professional development opportunities, including some designed to support new CTE teachers and CTE teachers who are in years 1-3 of their teaching experience by offering the following sessions:

76 classes total, (175 hours total)

CTE Best Practices- 10 classes each 2 hours long, total of 20 hours. -5 class were offered for 2 PDE Credits

Mentoring Aspiring Technical Educators (MATES) - 9 classes, 2 hours each, total of 18 hours

Mission Possible CTE series -23 classes, 3 hours each, total of 69 hours

CTE Technology series- 16 classes, 2hours each, total of 32 hours

Smart Tech series - 4 classes, 2 hours each, total 8 hours.

Praxis Prep Series - 8 classes, 2 hours each, total of 16 hours.

New teacher boot camp- 6 classes, 2 hours each, total 12 hours

In addition, CTE continuously works in conjunction with postsecondary institutions in helping Business & Industry (B&I) licensed teachers obtain the needed coursework to remove provisions from their licenses.

# Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials?

All participating schools used state allocation funds to purchase program area instructional materials, equipment, and supplies to comply with health and safety standards and to stimulate current and emerging technologies that are of sufficient quantity and quality to meet the needs of students. This funding allowed CCSD high schools to purchase relevant resources and updated equipment and supplies to meet industry standards and to provide students with real-world experiences in their respective programs of study.

Yes

Following is a chart providing detailed examples of actual instructional materials, technology supplies, and items of value purchases.

School	FY16 Examples of Items Purchased
Arbor View	Administrative Services: Job Ready Career Skills online, Managing Your Money online
	Marketing: Toner, flash drives
	Culinary: Groceries and culinary consumables
	Biomedical: Laptop cart
	Automotive: Metric micrometer set, socket and ratchet sets, saw blade, floor jacks, hood props, various tools
	Early Childhood: Working With Young Children books, Videos, Chromebooks
	Photography: Canon Rebel T5 cameras, replacement lens caps, memory cards, card readers, lens hoods, battery chargers

School	FY16 Examples of Items Purchased
	Theatre Technology: Laptop
	Computer Science: Raspberry Pi devices with camera board, touch screen, and plate kit
A-Tech	Accounting: Aplia software
	Business Management: Scanners, external hard drives, cameras, paper, flash drives, toner
	Criminal Justice: Scanner, shredder, paper, markers, toner
	Computer Science: Printer ink, desktop computers
	Information Technology: Wifi cards, wifi routers, hard drives, DVD drives, flash drives, cables
	Graphic Design: Cutting machine with scanner, Wacom Intuos pen tablet, flash drives
	Architecture: Plotter paper, printer ink, photo paper, marker sets
	Engineering: Printer, plotter paper, printer ink, PLTW fees
Basic	All Business & Marketing: Glogster, Animoto, flash drives, headphones, printer ink, copier, textbooks
	Accounting & Finance: Accounting Working Papers program
	Culinary: Kitchen equipment, tools, utensils, pans, groceries, food supplies for labs, educational videos, resource books
	Early Childhood: Food, crafts, consumable supplies such as play dough, recycled art, Educational videos, tabletop paper cutter
	Fashion: Fabric, notions, patterns, needles, scissors, zippers, dress forms
	Video Production: Memory cards, card readers, tripods, tripod dolly, microphones and clips, muslin background, camera case, shoulder rig, monopods
	Automotive: Face shields, fender covers, wrench sets, screwdrivers, socket sets, air ratchets, automotive stethoscopes, brake flaring tool kit, brake pad spreader, drills, jack, jack stands, soldering gun station, tap and die set
	Graphic Design/Animation: Mice, keyboards, mouse pads
	Theatre Technology: Instructional DVDs, glow tape, spike tape, bulbs, mic cables
Bonanza	Business & Marketing: iPad Airs, Macbook Pros
	Fire Science: Two person hose roller, door wedges, shoulder hoods, Ferno KED, K-Tool kit, charging base, search rope kit
	Graphic Design & Animation: iMac computers
	Video Production: Tripods, video dolly, video mount, camcorders, microphones
	Theatre Technology: Lamps, gels for lighting
	Furniture & Cabinetmaking: Shopbot router bits, mini lathe, lumber, project supplies
Boulder	Marketing/Entrepreneurship: Rebel T3I kit
City	Graphic Design: Instructional books and textbooks
	Video Production: Accessories for Rebel T3I camera
	Automotive: Face shields, drills, test lights, tire pressure gauges, tire tread depth gauges, wheel socket sets, air blow guns, antifreeze/coolant testers, battery tool kits,

School	FY16 Examples of Items Purchased
	brake tool sets, flare nut wrench sets, cylinder leakage tester, snap ring pliers sets
Canyon Springs	Landscape Design: Hand tools, mechanics tools, landscaping tools, power tools, irrigation parts, safety glasses, repair parts
	Culinary: Textbooks, food supplies
	Early Childhood: Textbooks, student portfolio supplies, preschool supplies
	Photography: Wireless trigger for studio lights, light stand, Wacom Creative pen tablet
	Video Production: InFocus Projector lamp, memory cards, lavalier microphones, Canon cameras, card readers, boom mic adapter, GoPro chest mount, mic cables, flash drives, tripods
Centennial	Horticulture: Lawn edger
	Business & Marketing: Virtual Business Management software, printer, toner, Powershot cameras, camera bags, tripod, iPad Airs, MacBook Pro
	Sports & Entertainment Marketing: Virtual Business software
	Business Software Apps: Micro Type 6 software
	Early Childhood: Clothing supply packs, breastfeeding devices, bottle caps, receiving blankets, balance beam, games, puppet stand, puppets, career vest and hat sets
	Culinary: iPad Airs, food supplies
	Photography: iMac computer, lens mount
	Theatre Technology: Wireless headmic set
	Fashion Design: Apple TV, light weight fusible fabric, fusible interfacing, fabric, zippers, bobbins, tape, chalk marking pencils
	Graphic Design: iMac computer, wide-angle lens
	Video Production: Vixia R600 camcorder, DVD-Rs
	Furniture & Cabinetmaking: Lumber
Chaparral	Business Software Apps/Marketing: Toner, scanner, document camera, paper, folders, binders
	Culinary: Food and supplies
	Theatre Technology: Light bulbs, theatre supplies
	Automotive: Textbooks
	Architectural Drafting: Townhouse kits, House kits, cabin kits, 3D Doodler
Cheyenne	Business & Marketing/Entrepreneurship: Printer, workbooks, projector, iPad cable, software
	Culinary: Hand mixers, flatware, blender, buffet server, food color, pastry bags, couplers, tip sets, muffin pans, squeeze bottles, aprons, towels, deep fryer, skillets, food supplies
	Early Childhood: Memory cards, MacBook Air, speaker system, center board, instructional books, maps
	Photography: Rebel T5I kit
	Graphic Design: Desktop computer

School	FY16 Examples of Items Purchased
	Theatre Technology: Table saw
	Drafting: MacBook Air, Apple TV, iPad Air
Cimarron-	Business & Marketing: MBA Learning Center
Memorial	Culinary: Food supplies, chef coats, chef hats, mixer attachments, knife roll, iPads and cases, kitchen utensils
	Theatre Technology: Ellipsoidal zoom
	Computer Science: RAM for desktop computers
	Photography: Camera cases, remote shutter triggers, Rebel T5 kits, light diffusers, disc reflectors, backgrounds, filter holders, gaffer grip, flood lights, filter packs, paper, printer ink
	Web Design: Curriculum packs, printer, toner
	Graphic Design: Printer, toner
	Video Production: Flash drives, memory cards, tripod with bag, portable hard drive
	Engineering: Vex flashlights, light sensors, extension wires
Clark	Business & Marketing: Printer, iPad Air, student laptop, Movie Studio software, microphone, Print Shop software, charger cable, camcorder, headphones, digital camera, headset with microphone, desktop computer, flash drives, printer ink
	AP Computer Science: A+ Curriculum materials
	Automotive: Career Safe online, automotive magazines, oil drain pan, double flaring tools, vacuum for vehicle liquids, liquid test strips, block tester, battery tester, tool sets
Coronado	Culinary: Tables and chairs
	Graphic Design: Printer, scanner, photo paper
	Video Production: Rebel T3i camcorder, tripod with bag
	Computer Science: Scanner
	Automotive: Flashlights, caliper hangers, pad spreader, floor jacks, hood prop, impact wrench
Del Sol	Business & Marketing: iPads
Desert Oasis	Business & Marketing: DECA handbooks, prep guides, flashcards, instructional books, table drape, portfolio notebooks
	Forensic Science: Forensic lab activities, slide sets, crime scene activities, sketching templates, fingerprints demonstration kits
	Sports Medicine: Seam and splice tape, foam underwrap, balance aides, tape cutter, knee immobilizer, bandages
	Video Production: GoPro camera, tripods
	Photography: Lenses, memory cards, Rebel T5 camera
	Furniture & Cabinetmaking: Lumber, plywood
Desert Pines	Sports & Entertainment Marketing: Die cutting machine, replacement blades, grip mats, student laptops
	Business & Marketing: Wireless computer adapters

School	FY16 Examples of Items Purchased
	Culinary: Storage bins, pots, pans, utensils, measuring spoons, catering supplies, cleaning supplies, aprons, bowls
	Early Childhood: Laptop, projector, screen mount
	Animation: Batteries, Digicel Flipbook software, Wacom Intuos drawing tablets
	Video Production: Batteries, tables, wireless computer adapters, Premiere Prosoftware
	Photography: Printer ink
	Radio Production: Loud speakers, speaker stands, radio mixing controller, amplifier, audio rack with table, controller rack with slide
	Automotive: Leak detector, power steering pump service set, service cart, jack stands, floor jacks, abrasive blast cabinet, metric o-ring assortment, terminal assortment, wire storehouse, tool box, soap, fluids, cleaners
	Furniture & Cabinetmaking: Tap and die set
	Construction: Desktop computer, cordless framing nailer
Durango	Business Software Apps: RAM for desktop computers, toner, flash drives
	Digital Game Dev: Scirra Construct software, Spriter Pro software
	Graphic Design: Printer, ink, paper, textbooks
	Automotive: Torque wrench, battery charger, brake tool kit, torque stick set, hydraulic press
ECTA	Marketing: Chromebooks, charging cart, Virtual Business software, instructional books
	Early Childhood: Colored paper, projector, dye cuts, iPad Airs and covers, scanner
	Culinary: Pasta machine, scales, containers, knives, utensils, racks, pans
	Health Science: Anatomy in Clay
	Video Production/Graphic Design: Memory cards, batteries, cameras and bags
	Video Production: Bulbs, lavalier microphones, wireless microphone
	Information Technology: Laptop cart, laptops
	Mechanical Technology: Clamp meter, infrared thermometer, multimeter
	Electronic Technology: Nuts and Volts subscription, fluke multimeter, laptop
	Construction Technology: Pliers, hand torch, PVC pipe cutter ratchet, trowels, grout sponges, concrete edger trowel, bench brush, wheel barrow, wood line block, finishing trowel, T-Squares, wire bending screwdrivers, framing squares, utility knives, T-Bevels, tubing cutters, hard hats, band saw blades, scaffold, miter saw, jig saw, push brooms, tape measures, propane bottles
Eldorado	Culinary: Specialty foods for labs
	Theatre Technology: Video camera, wireless microphone, sewing machine, table saw, paint, twist drill bit
	Automotive: Oil receptacle, hose reel, tire inflator, brake pad spreader, transmission funnel, fluid catch pan, splatter pad, file set, impact socket set, impact gun, air ratchet, brake bleeder, brake caliper hanger, fender covers, safety glasses, battery charging system tester

School	FY16 Examples of Items Purchased
Foothill	Horticulture: Flowers, water cans, seeds
	Business Management: Printers, headphones
	Culinary: Stainless prep table, aprons, sauce pans, scales, scoops, steam table pans, cooling racks, folding step stool
	Forensic Science: Lighting stand, macro lens, flexible clamp arm, photo jack
	Health Science: Electronic stethoscope, handheld ECG monitor, stethoscope, trigger aneroid
	Graphic Design: Printer, ink
	Theatre Technology: Stage floor mic, wireless lavalier microphone
	Fashion Design: Pattern drafting tool sets, muslin, cutting mats, dress forms, pattern cardboard, cloth weights, plotting paper, grommet die and cutters, pattern hangers, fabric
	Video Production: microphones, memory cards, tripods, camera mount, camcorder
Green Valley	All Business programs: iPads and covers, lavalier microphone, video cameras, printer toner
	Culinary: Various kitchen tools, utensils, measuring spoons, spatulas, food supplies
	Video Production: Shotgun microphones, wireless microphones, digital cameras, lavalier microphones, memory cards, iPad case, camera bags
	Fashion Design & Theatre Technology: iPads and covers
	Photography: Canon DSLR cameras, calibration system, photo paper, light meter
	Furniture & Cabinetmaking: Lumber, various shop items
Las Vegas	Business Software Apps: Printer ink
Academy	Photography: Printer ink, tripods, lighting equipment, document camera
	Video Production: Memory cards, Rebel T5I camera kits
	Fashion Design: Spool assortment, thread, needles, pins, tracing wheels, seam rippers, ball point bodkins, beeswax, machine needles, colored pencils, canvas pads,
	Theatre Technology: Paint, brushes, pump lid, pump kit, iPad Airs with covers
	Animation/Graphic Design: Tablet stand, instructional books, printer ink, wooden drawing mannequins and artist hands
	Graphic Design: Sublimation machine, inkjet printer
	Animation: iClone Animation Pipeline
Las Vegas	Culinary: Kitchen mixers, knives, food supplies
HS	Fashion Design: Fabric, lesson plan resources, rotary cutters, blades, mats, sewing supplies
	Business & Marketing: Toner cartridges, blank keyboards
	Drafting: Strawbale house kits, bridge building kits, residential home kits and accessories
	Welding: Welding gas, steel
	Automotive: Auto chemicals, safety equipment, hand and power tools

School	FY16 Examples of Items Purchased
Laughlin	Business & Marketing: Sony camera, DECA course guides, bell ringer, classroom
	posters, DECA prep guides and binders
	Culinary: Food supplies
Legacy	Administrative Services: Desktop computers
	Business & Marketing: GoPro camera
	Culinary: Stainless steel work table, lab stools, consumable food and supplies
	Fashion Design: Dress forms, bobbin cases, thread, foot controls
	Graphic Design: Desktop computers
	Video Production: Digital cameras, monitors
	Theatre Technology: Black fabric bolt, paint tray liners
	Furniture & Cabinetmaking: Router bits, miter saw blades, pen making mandrels, bushings, Dado blade set, lumber
	Automotive: Cooling system pressure tester and adapters, vises, safety glasses, tools
Liberty	Business Management: Tablet computer, keyboards
	Culinary: Consumable food supplies, calculators, food processors, food model, various kitchen supplies
	Graphic Design: Printer, ink, photo paper, instructional books, scanner
	Theatre Technology: Vectorworks software, network dongle
	Photography: Camera lenses, camera kit
	Web Design: Dreamweaver books, Code School subscription
	Video Production: Rebel T5i camera, tripods with bags, boom kit, lavalier system, memory cards, GoPro camera kit
Moapa Valley	Agriculture: FFA curriculum package, handheld GPS units, Habitudes books, Welding helmets, grinders
	Culinary: Consumable food supplies, various pans, speed rack, microwave oven, paper towel dispenser
	Fashion Design: Fabric, notions
	Graphic Design: Printer toner
	Photography: Printer ink
	Video Production: Video cameras
	Construction Technology: Drywall panels, lumber
Mojave	Agriculture: Seedling heat mat, flowers, shade clips, shade cloths, cell flats, starter plugs, pots
	Sports & Ent: Colored paper
	Culinary: Grill, fryer, chafing dishes, beverage containers, spring form pans, food supplies
	Sports Medicine: Wall mounted wall pulley, Theraband rolls, cryotherapy machine, Body Blade Pro, instructional books
	Animation: Desktop computers
	<u> </u>

School	FY16 Examples of Items Purchased
NWCTA	Business Software Apps: Printer toner, air canisters, sanitizer, printer
	Hospitality & Tourism: Event supplies, tablecloths, poster board, markers, tape, paper
	Early Childhood: Textbooks, instructional DVD's, laminator and refills, Real Care baby battery packs, printer toner
	Culinary: Food containers, pans, tongs, cutting boards, knives, food processors, condiment dispensers, food warmers, rice cookers, pancake dispenser
	Biomedical: Water quality testing, pig specimens, bacterial filters, nose clips, bones, urinalysis lab activity, cow eyes, sheep kidneys, chromatography kits, stethoscopes, sphygmomanometer aneroid, microwave oven, printer, PLTW fees
	Sports Medicine: Knee split, foot and ankle kit
	Video Production: Camcorders, tripods, boom pole kits, boom pole bags, card readers, memory cards, folding dollies
	Mechanical Technology: Safety glasses, hand tools
	Drafting/Engineering: Earth home kits, house kits, scales
	Engineering: Notebooks, wooden blocks, PLTW fees
	Construction Technology: Carpentry building supplies, metal building supplies
Palo Verde	Culinary: Consumable food supplies
	Video Production: Rebel T5i camera, Vixia cameras, memory cards, iPad Air, tripods
	Animation: 3D Printer and cartridges
	Fashion: Cloth, notions
	Theatre Technology: Instructional DVDs
	Engineering: Lynx robotic arms
Rancho	Culinary: Stainless steel tables, mixers, rack shelving, pastry bags, piping tip sets, cake set, cake rounds, instructional DVDs, instructional books
	Sports Medicine/EMT: Blood pressure cuffs, tape, monitoring electrodes, tape cutter, ECG electrodes, human eye model, modeling clay, anatomy specimens, latex gloves, medical trauma bags
	Fashion Design: Specialty fabrics, sewing notions
	Video Production: Tripods
	Photography: Monolight kit, battery packs, camera lens, tripod, photographic transceiver, background support system
	Graphic Design: Flatbed scanner, iMac computers
	Aerospace/Aviation Technology: QuadCopter kit, textbooks and guides
Sandy Valley	Agriculture: Seeds, soil, mulch, fertilizer, raised bed blocks, watering cans, shade cloth
SECTA	Culinary: iPad stands
	Cosmetology: Instructional DVDs and books, gel lamps, towel steamers, haircolor
	Sports Medicine: Textbooks, crutches, head immobilizers, spider straps, spine boards
	Medical Assisting:
	Nursing Assistant: Heart monitor, cold packs, hot/cold gel packs, male urinal with

School	FY16 Examples of Items Purchased
	cover, catheter tube holders, tongue depressors, swabsticks, hair caps, shoe covers, pulse oximeter
	Human Diseases: External hard drive, human tissue slide, pathology slide, survey slide set
	Animation: STEM software bundle, zSpace student station
	Photography: Printer ink, sublimation ink, tripods, cap keepers, remote shutters, balance cards, reflectors, diffusers, studio lights, backdrop support stand, projectors
	Web Design: iPad stands, headphones, Chromebook
	Digital Game Dev: XBox 360 controller for Windows, Wacom Intuos pen and touch tablet
	Graphic Design: Large format paper, photo paper, transfer paper
	Video Production:
	Networking: Network install tool kits, switches, routers, CCNA study guide, practice exam
	Architecture: Designjet printer
	Automotive: Creeper seats, palm sanders, air sanders, CDX online learning program, tools
	Construction Technology: Lumber, drills, tools
Shadow	Business Software Apps: Keyboarding online program, paper
Ridge	Culinary: Food supplies, smallwares, utensils, Chromebooks, GoPro camera kit, chef uniforms, textbooks
	Video Production: Studio lights, iPads with covers and mounts, tripods, microphones, reflector discs, Canon camcorder
	Photography: Mini tripods, memory cards, photo paper
	Automotive: Seat covers, wrench sets, flashlight, various hammers, bit sets, impact socket set
	Furniture & Cabinetmaking: Lumber, sandpaper, nails, screws, safety glasses, glue, brushes and lacquers for finishes
	Theatre Technology: Lamps, lights, cables, microphones, speakers, lumber, tools
Sierra Vista	Business & Marketing: Adage magazine, DECA prep guides, instructional books, bell ringer, Virtual Business Management, DECA podium banner and table drape, Competition University game suite, NeatReceipts for PC portable scanner
	Culinary: Double wall oven, food containers, high heat scraper, stock pots, sauce pans, trays, skimmers
	Animation/Graphic Design/Photography: Rebel T3i kits
	Computer Science: Java books, C++ books, Intro to Programming books
Silverado	Academy of Finance: Personal Finance software simulation
	Sports & Entertainment Marketing: Camcorders with batteries and bags
	Marketing: Wireless mice, whiteboards, presentation easels
	Early Childhood: RealBaby 3, iPads, smocks

School	FY16 Examples of Items Purchased
	Culinary: Specialty food supplies
	Graphic Design/Web Design: DSLR camera kits, scanner bar code library, camera batteries
	Photography: Printer, cameras, tripod heads, Mac Mini computer, Canon lens
	Theatre Technology: Tie line, microphones, cables, spotlight, spike tape, gaffers tape
	Academy of IT: Internet Essentials books, network cables, flash drives
Spring	Administrative Services: EDU Typing software, paper
Valley	Video Production: Canon T5i cameras
	Photography: Canon T5i cameras
	Theatre Technology: Speaker monitor for stage, microphone, stage lamp
	Automotive: Teacher laptop, metric impact socket set, shop consumables, Fractional impact socket set, Master Torx set, hood prop, impact driver, blow gun
Sunrise	Business & Marketing: Virtual Restaurant, Virtual Retailing, printer toner
Mountain	Culinary: Microwave, food supplies, knives, tongs, buffet utensils, stainless steel tubs, aprons
	Early Childhood: Mastering CDA Competencies manual, workbooks
	Fashion Design: Ironing boards, fabrics, notions, supplies, GoPro camera kit, memory cards
	Photography: Softboxes, hot light kit, bulb flash, lenses, speedlight, card readers
	Video Production: Lavalier microphones, Powershot camera, memory cards, camera stabilizer, headphones
	Web Design: Instructional books, Cleverbride's Website Evolution software, iPad Airs
	Automotive: Today's Classroom online program, allen wrenches, cleaner
SWCTA	Business Software Apps: iPad Airs
	Hospitality: START workbooks
	Culinary: Blenders, various food supplies
	Health Science Programs: iPad Airs, drug affected baby, nebulizer system, infant radiant warmer, 2-rail bed
	Video Production: Hard drives, camcorders, various microphones, camera kit
	Fashion Design: Sewing machine parts, irons, store display, ironing boards, drawing mannequins, pinking shears, dress forms
	Animation/Graphic Design: Projector, tablet
	Interior Design: Textbooks, cutting mat
	Digital Game Dev: MacBook Pro, hard drives, microphones, headphones, cables, Python curriculum lab software, Scribbler robot with add-on board, Bluetooth adapter, batteries and charger
	Electronic Technology: Multimeters
	Mechanical Technology: Digital caliper, mice, tap and bit set, tool bit set, end mill sets, metal shop hand tools, Millermatic gun with cable

School	FY16 Examples of Items Purchased
	Engineering: 3D Printer, Automoblox, notebooks
	Mechanical Technology and Engineering: Nema stepper motors, motor drivers, Edison with Arduino kits
Valley	Marketing: Laptop, camcorder, instructional DVDs and simulations
	Culinary: Kitchen supplies and tools, garbage disposal, food supplies, paper goods
	Theatre Technology: Vacuum form machine, plastic sheets, lamp tester, power tester, stage pins, light templates, drill, paint
	Automotive: Remote scales, wheel weight kit
Virgin	Agriculture: FFA curriculum package, rototiller, clipper with blade
Valley	Furniture & Cabinetmaking: Lumber
	Automotive: Automotive tools
VTCTA	EMT: Splints, tourniquets, child airway trainer, stretcher with pins
	Health Science: Remote speaker mic packs, training batons, headsets, desktop computers, crime scene vests, trajectory forensic mannequin, synthetic blood, crime scene barrier tape, spatter blood, hemastix strips, blood test, swabs, nitrile gloves, riker mounts, insect nets, pins, display boxes, bones, calipers, maglites, clipboards, kimwipes, test tubes, hard drive
	Video Production: Camcorders
WCTA	Environmental/Greenhouse Management: Instructional books, soil
	HS of Business: Glogster, Moodle, cable adapters, HSB fee, Certiport practice materials
	Business Software Apps: Projector screen, network storage devices
	Sports Medicine: Disarticulated skeletons, cplint, air casts, mini skeletons
	PLTW: Micropipettes, Lab Quest Mini, clay manikens, clay, molecular puzzles, PLTW fees
	Nursing Assistant: Dual stethoscope, storage containers, screen cleaners, bandages, sterile pads, gloves, probe covers, thermometer covers, ear scan thermometers
	Photography: Rebel T5i kits, tripods, memory cards
	Animation: Intuos drawing tablets, memory cards, desktop computers
	Information Technology: Mobile tablet devices, network cables, connectors, accessories
	Graphic Design: Designjet printer
	PLTW Engineering: Printer ink, PLTW fees
West Prep	Culinary: Salad bar, ice maker, stand mixer, various food pans, work table, food, smallwares
	Fashion Design: Bobbin cases, sewing supplies
Western	Business Software Apps: Headphones
	Culinary: Food supplies, garnishing sets, sheet pans, box graters, zesters
	Sports Medicine: Hand sanitizer, Versa tube, agility dots, reaction balls, agility ladders, balance trainers, power web, tape cutter, tape, tape remover pads, ice bags, extremity splints, rescue masks, stethoscopes, foot/ankle model and chart, hip/knee

School	FY16 Examples of Items Purchased
	chart, skeletal system charts
	Video Production: Camcorders, headsets
	Photography: Rebel T5 camera kits, camera lenses and accessories, memory cards
	Graphic Design: Headphones

Project	FY16 Examples of Items Purchased
Microsoft IT Academy	Microsoft IT Academy software, Gmetrix site licenses
Career Centers	Desktop computers, printers, college and university maps
Furniture & Cabinetmaking	Hand and power tools, laser engravers, fume extractors, iPads, laptops
Culinary Arts Improvement	Planetary mixers, work tables, stools, ranges, ovens, fryers, merchandiser, refrigerators, freezers, iPads and iPad carts
Site Licenses	Lynda.com and Creative Cloud software licenses
Mechanical Technology Improvement	Laptops, VEX IQ robotics kits
Theatre Technology Improvement	Controller consoles, iPads, instructional DVDs, Apple Logic Pro software, QLab software, laptop computers
Information and Media Technology Improvement	Textbooks, iPads, tablet computers, desktop computers, digital cameras, Photoshop software
Business & Marketing Textbooks	Textbooks

## Community, Business, and Industry Involvement

Were funds used for community, business, and industry involvement? Yes

Funds were used to purchase CTE specific marketing materials, signs, and banners that were used at the Las Vegas Chamber of Commerce BE+Engaged (Business & Education + Engaged) event at the Smith Center of Performing Arts. All CTE programs were promoted to the local business community and contact information was collected for businesses to participate in guest speaking, mentoring, etc.

CCSD facilitated collaboration and partnerships with business, industry and the community at large via a CTE Advisory Committee, Las Vegas Global Economic Alliance, Las Vegas Chamber of Commerce, Garage Games, just to name a few.

Partnerships and support of CTE programs was also obtained for providing CTE sponsored events such as National Job Shadow Day, Manufacturing and Construction Days, and the Tech Expo.

Funds to support field trips and industry tours for students to gain industry knowledge (i.e., Aviation Institute of Maintenance, UNLV Preschool visits, UNLV Senior Design Day, Three Square Food Bank, the Downtown Project, the Art Institute, Ethel M. Chocolates, Springs Preserve, World of Concrete, Neon Museum, Zappos, Downtown Summerlin and the Bodies Exhibit) were also used.

Students enrolled in select Video Production programs were able to work with industry professionals at Vegas PBS to gain insight into real-world tasks that would be required on the job.

#### Guidance

Were funds used for career guidance services? Yes

Funds were used to provide transportation and lodging for 50+ counselors and administrators to attend the first Career Pathways Nevada Leadership Summit. This professional development provided participants with the opportunity to network with peers from across the state and to hear from the state superintendent and representatives from the Nevada System of Higher Education (NSHE).

CCSD schools provided students access to local career and postsecondary options through career expos at 20 of the high schools.

CCSD partnered with NSHE and NROC to provide support for students in the 11th and 12th grades with the EdReady program. In support of the ACT, Nevada's College and Career Readiness (CCR) Assessment, the CTE College and Career Center Specialists were trained on the steps to help students log-in and pull reports on student progress.

### **Program Promotion and Marketing**

Were funds used for program promotion and marketing? Yes

The primary means for program promotion for Career & Technical Education was via social media (i.e., CTE and ESCR websites, Twitter, etc.). Although this was the case, funds were used for specific CTE marketing purposes including:

- 1 A floor-standing CTE banner to be used at open houses and community events
- 2 A district-wide map showing CTE programs located by performance zone
- Workplace Readiness Skills posters

Additionally, with the establishment of 43 college and career centers in CCSD high schools, funds were used to purchase materials on careers and postsecondary opportunities.

#### Student - Teacher Ratio

Were funds used for class sizes to ensure effective instruction and safe conditions? Yes

To ensure effective instruction, funds were used to provide 46 prep buyouts in 27 high schools for the offering of Level 3 courses in programs of study.

An example of funds used to ensure safe conditions include the offering of safety training including OSHA and Forklift trainings. In addition, CTE administrators and teachers work closely with the CCSD Risk Management Dept. to ensure safety rules and guidelines are being followed.

Teachers also attend the National Center for Construction Education Research (NCCER) trainings which are offered.

## **Programs Leading to a National Credential or Certification**

Were funds used for programs that lead to national credentials/certifications? Yes

Funds were used to prepare students for national certifications including:

- ServSafe certification through the National Restaurant Association
- CISCO program certifications

Funds were used to prepare students to obtain a national credential including:

- National Academy Foundation (NAF) Academy of Finance
- National Academy Foundation (NAF) Academy of Hospitality
- MBA Research's High School of BusinessTM (HSB)

- Project Lead the Way (PLTW) in Biomedical
- Emergency Medical Technician (EMT)
- Child Development Associate for Early Childhood Education
- Sports Medicine and Nursing Assistant

# Section 2: Description of Uses of Funds – School Based

All participating schools used state allocation funds to purchase program area instructional materials, equipment, and supplies to comply with health and safety standards and to simulate current and emerging technologies that are of sufficient quantity and quality to meet the needs of students. This funding allowed CCSD high schools to purchase relevant technologies and upgrades to meet industry expectations and provide students with real-world experiences in their respective programs of study. Following is a chart providing the amount each school received and the number of students served.

School	Amount Received	Students Served	
Arbor View	\$21,933.94	1,260	
Advanced Technologies Academy	\$33,245.52	1,185	
Basic	\$22,846.16	1,653	
Bonanza	\$15,872.71	749	
Boulder City	\$4,297.59	246	
Canyon Springs	\$27,751.90	1,387	
Centennial	\$32,819.82	2,136	
Chaparral	\$13,825.27	928	
Cheyenne	\$23,332.68	1,499	
Cimarron-Memorial	\$29,029.02	964	
Clark	\$20,251.39	1,205	
Coronado	\$15,487.55	864	
Del Sol	\$5,572.71	829	
Desert Oasis	\$13,075.22	1,242	
Desert Pines	\$25,805.82	1,902	
Durango	\$9,487.14	642	
ECTA	\$56,152.50	2,528	
Eldorado	\$13,460.38	895	
Foothill	\$22,400.18	1,301	
Green Valley	\$18,062.05	1,040	
Las Vegas Academy	\$10,662.89	434	
Las Vegas HS	\$21,893.39	1,117	
Laughlin	\$1,560.92	114	
Legacy	\$36,549.80	2,045	
Liberty	\$22,359.64	1,569	
Moapa Valley	\$12,122.45	609	
Mojave	\$14,190.16	887	
NWCTA	\$58,625.64	2,297	
Palo Verde	\$13,257.67	2,126	
Rancho	\$37,705.29	2,133	
Sandy Valley	\$973.04	49	
SECTA	\$44,982.81	1,708	
Shadow Ridge	\$29,839.88	1,978	
Sierra Vista	\$12,913.05	980	
Silverado	\$20,616.28	1,682	
Spring Valley	\$9,142.52	581	
Sunrise Mtn	\$25,055.77	1,663	

School	Amount Received	Students Served
SWCTA	\$71,072.45	2,207
Valley	\$16,744.39	1,948
Virgin Valley	\$8,493.83	668
VTCTA	\$18,102.59	764
WCTA	\$46,178.84	1,870
West Prep	\$3,243.47	266
Western	\$27,062.67	2,067

In addition to the school-based allocated funds listed above which supported existing CTE programs, the following new programs were also started this year with State CTE funds: Forensic Science at Basic, Chaparral, Cheyenne, Del Sol, Eldorado, Foothill, Liberty, Legacy, Palo Verde, Shadow Ridge, Silverado, Valley and Veterans Tribute CTA; Manufacturing Technology at Cimarron-Memorial; Electronics Technology at SWCTA and WCTA; and Construction Technology at Desert Pines and Mojave.

The goal of developing these programs within CCSD is to provide students with education and training identified as high needs for Nevada's future workforce. These programs will improve the alignment between the skills being taught and those needed by industry employers in areas where worker supply is low (i.e., manufacturing, construction, etc.).

The outcomes for this year for these programs included:

- providing classes in these areas for 1,336 students in Forensic Science, 13 in Manufacturing
   Technology, 31 students in Electronics Technology and 162 students in Construction Technology
- providing teacher training in the technical skills and application knowledge to teach the classes
- providing instructional and technology supplies for program start-up
- providing resources to support student enrollment and program development to allow students maximum chance to successfully complete the program of study.

#### **Section 3: General Description of Uses of Funds – District Level**

In addition to the school-based funds and new programs listed above, funds were also spent at the district level to improve and expand existing CTE programs of study. The following programs received support this year with State CTE Allocation funds: Microsoft IT Academy at Bonanza, Cimarron-Memorial, Foothill, Las Vegas HS, and Silverado; Job Shadowing at 46 high school sites; Manufacturing Day at Basic, Coronado and Green Valley; Career Centers at 30 high school sites; Professional Development for Counselors at 46 high school sites; Furniture & Cabinetmaking at Bonanza, Centennial, and Desert Oasis; Culinary Arts at Chaparral and Cheyenne; Site Licenses at 42 high school sites; Mechanical Technology at ECTA, NWCTA, and SWCTA,; Theatre Technology at 32 high school sites; Information and Media Technology at 42 high school sites; Level 3 Program Completion at 27 high school sites; and Business & Marketing at Boulder City, Centennial, Cimarron-Memorial, Clark, Green Valley, Liberty, Sierra Vista, and Valley HS.

College and Career Centers were established in the following high schools: Bonanza, Boulder City, Canyon Springs, Centennial, Cheyenne, Cimarron-Memorial, Coronado, Del Sol, Desert Oasis, Desert Pines, Durango, Eldorado, Indian Springs, Las Vegas, Las Vegas Academy, Laughlin, Legacy, Moapa Valley, Mojave, Palo Verde, Rancho, Sandy Valley, Shadow Ridge, Sierra Vista, Sunrise Mountain, Virgin Valley, West CTA, and West Prep.

High schools provided a dedicated space for the CTE personnel to meet with students on employability skills, test preparation, career exploration, and job shadowing.

Career and Technical Student Organization (CTSO) activities were also supported with the State CTE Allocation funds. These activities are detailed in Section 1, Question 2 above.

The goal for expansion and improvement of these programs within CCSD is to provide students quality CTE programs as defined by the Nevada Program Quality Criteria to improve student achievement. The outcomes for this year for CTE programs included:

- provided for the offering of 46 level 3 classes to maintain a full program of study at 27 high schools
- 2 provided an opportunity for participation of 1,715 students at CTSO state conferences
- 3 provided for 28 Career Center Specialists to support career and technical education
- 4 state assessment data results as follows:
  - a. 5,593 students participated in an end-of-program assessment
  - b. 3,227 students passed an end-of-program assessment
  - c. 4,662 students participated in the workplace readiness assessment
  - d. 3,399 students passed the workplace readiness assessment.

### **Douglas County School District**

Funding Awarded: \$105,464.19
 Funding Expended: \$102,825.15

### Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in five criteria.

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

Douglas County School District (DCSD) continues to offer new and/or expanded Career and Technical Education (CTE) programs of study to its students. The FY16 State Allocations Grant provided the opportunity to expand two programs of study to include Level 3 (completer) course work. The Automotive Technology program expanded to include Automotive Technology III. This program of study has a current enrollment of 102 Level 1 students, 23 in Level 2 and 15 in Level 3. The Graphic Design program of study added Level 2 and Level 3 courses to its curriculum. Current enrollment shows 85 in Level 1, 49 in Level 2 and 4 in Level 3. Despite low enrollment in the L3 course this year, it is anticipated that next year there will be at least one section of Graphic Design III with an enrollment of 20 or more students. These programs are directly aligned with standards set by Nevada Department of Education CTE department. Teachers have designed their instruction to meet or exceed course objectives. Funds from the FY16 State Allocations Grant have been used to acquire materials and supplies to provide students a real world, hands-on experience in the classroom. As a result of the expansion of these programs, more students have taken the End of Program assessments and have become eligible to obtain CTE College Credit.

#### **Leadership Development**

Were funds used for leadership development? Yes

Douglas High School has three CTSO programs: FFA, HOSA, and SkillsUSA. These programs are growing and continue to develop leadership programs at local and state levels. With the addition of the freshman class to Douglas High School and the anticipated growth in CTSO membership, grant funding has been used for the acquisition of classroom and leadership training materials and for student/staff travel to state and national conferences. Ninety-eight students participated in FFA activities last year and were provided opportunities to go to state and national level competitions. Twenty-eight FFA students went to state competition and one student was elected to state office for 2016-2017. SkillsUSA had an enrollment of 65 students while HOSA boasted a whopping 100 student roster with 14 going to state competition and 6 moving on to national competition. Funds from this grant were used mostly for state-level travel expenses.

## Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

In order for students to meet and exceed state and/or industry standards, Douglas County School District purchased the following supplies, materials and equipment to support student projects:

Agriculture – Douglas High School

- Brecknell PS1000 Animal Scale and Stand
- Intelligent Weigh Bench Scale
- Nevada Agricultural Education Curriculum Package
- Consumable supplies and materials

Culinary Arts - Douglas High School

- Mini Electric Gyro Machine
- De Buyer Crepe Pans
- Channel 13 Pan Front Load Bun Pan Rack
- Consumable supplies and materials

Automotive Technology - Douglas High School

- "All Data" Annual Subscription for online troubleshooting and repair information
- Consumable supplies and materials

Welding - Douglas High School

- Lincoln Cobra Push-Pull Gun
- Tennsmith Hydraulic Sheet Shear
- Consumable supplies and materials

Graphic Design – Douglas High School

- Apple Laptop MacBook Pro 15" for use in Graphic Design III
- Consumable supplies and materials

Photography – Douglas High School

- Ricoh WG-4 Waterproof Digital Cameras
- Epson Expression Home XP-410 Printer

#### **Program Accountability and Planning**

Were funds used for program accountability and planning? Yes

Program accountability is gauged through assessment within the program of study. Every CTE and PLTW instructor administers a series of benchmark assessments – either written or demonstrated. These assessments are combined with assessments that are designed to help students meet the objectives of the course. These assessments include student reports, quizzes, tests and final exams. At the end of the school year, students enrolled in Level 3 courses such as Automotive Technology, Culinary Arts, Graphic Design, Photography, and Welding Technology, are eligible to take the CTE End of Program Assessments: the Workplace Readiness Skills Assessment and the End-of-Course Assessment for their program of study. At the end of the 2015-2016 school year, DCSD had a 100% participation rate in the Workplace Readiness Skills Assessment and an 80% pass rate. The End-of-Course assessment had a 100% participation rate with a 46% passing rate over the five programs listed above. Automotive

Technology and Graphic Design students were new to the assessments this year and DCSD will be adding Biomedical to the assessment roster for 2016-2017.

## **Programs Leading to a National Credential or Certification**

Were funds used for programs that lead to national credentials/certifications? Yes

The CTE program in Douglas County School District offers several programs that lead to either a state or national certification. Certifications available to DCSD students include the following:

- National Center for Construction Education and Research (NCCER) Certification Welding Technology
- ProStart Certification (national) Culinary Arts
- Nevada Department of Education, Career and Technical Education
  - Workplace Readiness Skills Certificates
  - o Technical Skill Attainment (End of Program) Certificates
    - Automotive Technology
    - Culinary Arts
    - Graphic Design
    - Photography
    - Welding Technology

### Section 2: General Description of Uses of Funds – School Based

In the fall of 2015, the freshman class returned to Douglas High School, making DHS a true 9-12 high school. As a result, class enrollments increased in several Level I courses. The items that were purchased with State Allocations funds made it possible for students to experience more industry-level instruction and to better meet the needs and expectations of the CTE state standards.

# Douglas High School - \$29,031.71

Agriculture - program enrollment Levels I - III = 86

- Brecknell PS1000 Animal Scale and Stand
- Intelligent Weigh Bench Scale
- Nevada Agricultural Education Curriculum Package
- Consumable supplies and materials

Biomedical Science (PLTW) – program enrollment Levels I - II = 81

• Consumable supplies and materials

Culinary Arts – program enrollment Levels I – III = 131

- Mini Electric Gyro Machine
- De Buyer Crepe Pans
- Channel 13 Pan Front Load Bun Pan Rack
- Consumable supplies and materials

Automotive Technology – Expanded completer program of study – program enrollment Levels I – III = 94

- "All Data" Annual Subscription for online troubleshooting and repair information
- Consumable supplies and materials

Welding – program enrollment Levels I – III = 114

- Lincoln Cobra Push-Pull Gun
- Tennsmith Hydraulic Sheet Shear
- Consumable supplies and materials

Graphic Design – Expanded completer program of study – program enrollment Levels I – III = 133

- Apple Laptop MacBook Pro 15" for use in Graphic Design III
- Consumable supplies and materials

Photography –program enrollment Levels I - III = 102

- Ricoh WG-4 Waterproof Digital Cameras
- Epson Expression Home XP-410 Printer
- Consumable supplies and materials

## **Section 3: General Description of Uses of Funds – District Level**

No funds were used for district level activities.

# **Elko County School District**

Funding Awarded: \$283,533.38
 Funding Expended: \$273,357.07

## Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in four criteria.

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

ECSD used funds to supplement instruction for new Programs of Study, including the Carlin HS Mechanical Technology program and the Early Childhood Education programs at Carlin, Elko, and West Wendover High Schools.

### **Leadership Development**

Were funds used for leadership development? Yes

ECSD used \$36,211.94 to supplement student travel for CTSO Leadership events. The District maintains excellent enrollment and CTSO Leadership participation in HOSA, FFA, FBLA, Skills USA and FCCLA at all applicable school sites. In 2015-16, 164 students qualified through State events for National participation and recognition in these areas.

#### **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

ECSD used funds, \$2,184.30, for in-state, Department of Education sponsored trainings.

## Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

The majority of the grant funds used, \$224,092.56, were used for this category. Improvements were made to instructional materials, especially in the area of technology, as each CTE Program of Study area, Districtwide, has access to computer use for each student. All programs have updated software

applications for their curriculums to align with Standards. In addition, items of higher value, including CNC manufacturing machines, were purchased for both Metal and Wood Technology programs.

## Section 2: General Description of Uses of Funds - School Based

## **Carlin High School - \$29,424.03 – 106 Students**

Skilled and Technical Sciences -

- Welding Technology I, II, and III
- Drafting & Design I, II, and III
- Mechanical Engineering Technology I, II, III 2nd year

Education, Hospitality and Human Service –

- Foods & Nutrition I, II, and III
- Early Childhood Education I, II, and III
- Fashion Design & Construction I and II

### Elko High School - \$111,358.27- 1169 Students

Agriculture and Natural Resources -

- Agriculture Science I, II, and Agribusiness Systems
- Agriculture Science I, II, and Agriculture LCP
- Agriculture Science I, II, & Veterinary Medicine III
- Agriculture Science I, Plant Science / OH, Greenhouse Mgt.
- Agriculture Mechanics Technology I, II, and III

Education, Hospitality and Human Services -

- Foods & Nutrition I, Human Development I, Fashion Design and Construction I, Family & Consumer Science
- Foods & Nutrition I. II. and III

Business and Marketing Education -

- Principles of Business & Marketing, Entrepreneurship I, and Entrepreneurship II
- Principles of Business & Marketing, Business Mgt. I, and Business Mgt. II

Skilled & Technical Science –

- Automotive Technology I, II, and III
- Construction Technology I, II, and III
- Furniture & Cabinet Making I, II, and III
- Drafting & Design I, II, and III

Information & Media Technology –

- Graphic Design I, II, and III
- IT Essentials I and II

Health Science & Public Safety -

• Health Science I and II, Biomedical III (final year)

## Spring Creek High School- \$67,433.08- 949 Students

- Agriculture and Natural Resources –
- Agriculture Science I, II, and Agribusiness Systems
- Agriculture Science I, II, and Agriculture LCP
- Agriculture Science I, II, & Animal Science
- Agriculture Science I, Plant Science / OH, Greenhouse Mgt.
- Agriculture Mechanics Technology I, II, and III

## Education, Hospitality and Human Service -

- Fashion Design and Construction I, II, and III
- Foods & Nutrition I, II, and III
- Early Childhood Education I, II, and III

## Business and Marketing Education –

- Principles of Business & Marketing, Business Mgt. I, and Business Mgt. II
- Accounting and Finance I, II, III

## Skilled & Technical Science -

- Furniture & Cabinet Making I, II, and III
- Drafting & Design I, II, and III

## Information & Media Technology –

- Graphic Design I, II, and III
- Animation I and II- New program

# Health Science & Public Safety -

• Health Science I and II, Biomedical III (last year)

## Jackpot High School- \$7834.57-71 Students

### Skilled & Technical Science -

• Furniture & Cabinet Making I, II, and III

#### Business and Marketing Education -

- Accounting and Finance I and II
- Business Software Applications, Office Mgt I and II
- Principles of Business & Marketing, Business Mgt I & II

#### Owyhee High School- \$17,040.82- 76 Students

## Agriculture and Natural Resources -

- Agriculture Science I, II, and Natural Resource / Wildlife Mgt.
- Agriculture Science I, Plant Science / OH, Greenhouse Mgt.
- Agriculture Mechanics Technology I, II, and III

## Business and Marketing Education –

- Business Software Applications and Office Mgt. I
- Accounting and Finance I, II, III

## Wells High School- \$11,850.87- 126 Students

- Agriculture and Natural Resources –
- Agriculture Science I, II, and Agribusiness Systems
- Agriculture Science I, II, and Agriculture LCP
- Agriculture Science I, II, & Natural Resource / Wildlife Mgt.
- Agriculture Science I, Plant Science / OH, Greenhouse Mgt.
- Agriculture Science I, II, & Veterinary Medicine III
- Food Science and Technology new program
- Agriculture Mechanics Technology I, II, and III

Business and Marketing Education -

• Principles of Business & Marketing and Business Mgt I

# West Wendover High School- \$38,590.45-385 Students

Skilled & Technical Science -

- Furniture & Cabinet Making I, II, and III
- Welding Technology I, II, and III

Information & Media Technology –

• Graphic Design I, II, and III

Business and Marketing Education -

• Business Software Applications, Office Mgt. I and II

Education, Hospitality and Human Service -

- Fashion Design and Construction I and II
- Foods & Nutrition I, II, and III
- Early Childhood Education I, II, III

Health Science & Public Safety -

- Foundations of Public Safety and Criminal Justice II & III
- Emergency Telecommunications I and II new program

# Section 3: General Description of Uses of Funds – District Level

No funds were used for District level activities or services.

### **Eureka County School District**

❖ Funding Awarded: \$7,181.80
 ❖ Funding Expended: \$7,181.80

## Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in two criteria. Funds were used to provide leadership development opportunities and purchase equipment.

## **Leadership Development**

Were funds used for leadership development? Yes

Funds were used for student travel for participation in state and national FFA leadership conventions.

# Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials?

Funds were used to purchase an Industrial Sheet Metal Shear to meet State Standards for the Welding Technology students.

Yes

## Section 2: General Description of Uses of Funds – School Based

No funds were used at the school based level.

## Section 3: General Description of Uses of Funds – District Level

No funds were used at the district level.

### **Humboldt County School District**

Funding Awarded: \$92,084.40
 Funding Expended: \$89,604.08

# Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in three criteria.

### **Leadership Development**

Were funds used for leadership development? Yes

In Object Code 581, the LHS Ag Advisor rooms, per diem and transportation used \$627.08 of grant funds. Substitute salaries at LHS to support teacher participation in CTSO activities spent \$1,344 for salaries and \$123.02 was spent on substitute benefits. The LHS Welding teacher used \$564 for advisor rooms and bundled registration. The LHS Welding program spent an additional \$5,253.55 on student CTSO travel. The LHS Business/IT program spent \$719 on advisor rooms and registration. The LHS Business program spent \$1,323.12 on student CTSO travel.

## **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

We utilized \$260 for LHS Ag teacher registration at conferences for professional development.

#### Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

The district hired a mechanic to repair equipment in the McDermitt Ag Mechanics laboratory at a cost of \$4,000. Grant funds were expended in budget code 610 in the McDermitt ag mechanics laboratory in the amount of \$18,231.70 to replace equipment and in budget code 612 and 650 \$7,357.26 was spent on technology improvement. The McDermitt Business program spent \$543.46 on technology supplies and \$1,500 on software licensing. The McDermitt Business program upgraded all of the computer systems in the lab at a cost of \$22,145.28. The Lowry Welding department spent \$550 on office supplies for classroom use. The Business program at LHS spent \$1,631.21 on textbooks, \$1,299.10 on technology licensing, and \$3,018.51 on technology equipment. The Woods program at LHS spent \$2,529.57 on shop supplies and another \$2,574.22 on new equipment in the laboratory.

## Section 2: General Description of Uses of Funds – School Based

The majority of the Allocation budget was spent to upgrade facilities at McDermitt combined school in the Agriculture and Business programs with a total expenditure of \$53,777.70. Funds in the amount of \$21,826.38 were expended at Lowry High School to facilitate CTE improvements and instruction.

## **Section 3: General Description of Uses of Funds – District Level**

No funds were used for district level activities. All associated district costs are covered under the HCSD General Fund.

## **Lander County School District**

❖ Funding Awarded: \$9,739.70❖ Funding Expended: \$8,066.00

## Section 1: Overall Description of Project and Impact Statement

Battle Mountain High School received \$9,739.70. Of that amount, \$8,066.00 was expended. The project outcome for the health sciences program was to assist students in achieving their CNA certification. The outcome for the Ag Mechanics program was to build the program such that it will have three years of courses resulting in program completer status. The health sciences program had approximately 30 students involved (the school enrollment is 285). The Ag Mechanics program had enrollment of about 40. Both programs are expected to grow and increase in enrollment each year moving forward.

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

Funds were used to purchase supplies to develop approved courses, for curriculum materials, and for professional development.

#### **Leadership Development**

Were funds used for leadership development? Yes

Funds were used to attend the State Leadership Conference. Additional funds were used to purchase a MyCaert subscription for the Ag program.

## Section 2: General Description of Uses of Funds – School Based

No funds were used at the school level.

#### **Section 3: General Description of Uses of Funds – District Level**

No funds were used at the district level.

## **Lincoln County School District**

❖ Funding Awarded: \$80,475.47❖ Funding Expended: \$80,475.47

#### **Section 1: Overall Description of Project and Impact Statement**

Funding received from State Allocations went to program improvement objectives in five criteria.

### Standards and Instruction

Were funds used for standards and instruction? Yes

100% of purchases were for standards and instruction. The CTE programs of study included in the funding of this grant were: Agriculture I & III, Agriculture Leadership, Agriculture LCP, Graphic Design, Accounting I & II, Clothing & Textiles, Culinary Arts, Welding I & II, Auto I & II, Woodworking I & II. All items purchased were used to enhance current programs with new inventory,

supply staff/student travel for FFA competitions, and aid in the overall improvement of programs by updating labs to industry standards services all students enrolled. Students were able to attend state and national conventions, learn about judicial processes, compete against peers, prepare speeches, and otherwise improve their public interaction abilities; in addition, students were able to practice entrepreneurial skills through school-based enterprises, practice designing, creating, and completing projects using new inventory and software.

## **Leadership Development**

Were funds used for leadership development? Yes

Staff/students were able to utilize funding through this grant for travel to State and National FFA competitions. Students that attended these conventions were able to learn about judicial processes, compete against peers in specifically identified areas, prepare speeches and debates, and otherwise improve their public interaction abilities through preparation and application. Total funding used for this purpose was \$21,456.19.

### **Practical Application of Occupational Skills**

Were funds used for work-based learning opportunities? Yes

Students in Agriculture were able to produce greenhouse plants available for public purchase, and students in Auto, Welding, and Construction were able to diagnose and repair, design and produce, and otherwise bill and manage accounts for customer jobs. All work-based learning took place in the classroom or lab.

## **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

Funds were used to send staff to State and National FFA conventions. The cost of these trips are exorbitant and the expectation of staff paying out of their own pockets for these trips is unreasonable. The grant monies we receive for these trips are necessary in order for staff to be able to attend with their students.

#### Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

Supplies and equipment were purchased for each program. The supplies and programs were greenhouse supplies for agriculture; a 4-color station press, transfer vinyl, Chromebooks for graphic design; hoops, thread, stabilizer, machine parts, Corel Draw, bowls, beaters, etc., for clothing and textiles and culinary arts; tool boxes, wrenches, ratchets, plasma cutter, saw tables, saws, welding rods, air compressor for auto, welding, and furniture & cabinetmaking.

## **Section 2: General Description of Uses of Funds – School Based**

- CO Bastian High School = \$13,595.07 approximately 120 students served
- Lincoln County High School = \$40,580.89 approximately 100 students served
- Pahranagat Valley High School = \$26,299.51 approximately 60 students served

Project outcomes are such that classrooms are more fully stocked with inventory necessary for instruction on an industry standard level. In addition, updated inventory and functioning equipment have enabled students to desire to remain enrolled in sequenced courses, encouraging more program completers.

### Section 3: General Description of Uses of Funds – District Level

No funds were used at the district level.

## **Lyon County School District**

Funding Awarded: \$188,891.08
 Funding Expended: \$66,153.91

## Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in four criteria.

- Fernley High School: \$43,278.55, 681 students served
- Smith Valley School: \$1,090.75, 117 students served
- Yerington High School: \$10,230.70, 408 students served
- Dayton High School: \$6,543.94, 482 students served
- Silver Stage High School: \$5,009.97, 231 students served

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

Instructional Materials for Business & Marketing Education at YHS: Business & Marketing utilized funds to purchase instructional materials to improve instruction on Microsoft Office 2013 and help students obtain the knowledge on up-to-date technology and become more work ready.

Instructional Materials for Information & Media Technologies at YHS: Textbook bundles to allow students' access to the most up to date information available to them, setting the foundation for further learning and alignment to state standards. Performance Standard 1.5 (Explore careers in the video industry), 2.1 and 2.2 under content standards 2.0 (Safety and Personal Responsibility in the workplace), and 3.1-3.4 under content standard 3.0 (Demonstrate the use of Video Production equipment).

Instructional Materials for Skilled & Technical Sciences at FHS: Purchase of Modern Cabinetmaking books to support instruction and provide up-to-date techniques. Support alignment with program standards.

Web-based programs for the Health Science & Public Safety at DHS: Medical Terminology program for use in classroom instruction.

Web-based programs for the Information & Media Technologies at SSHS: TestOut PC Pro allows students to walk through the 145 training videos, 119 demonstrations, 96 section quizzes, 96 Lab simulations, 155 Written lessons, and 1059 Exam questions at a self-controlled pace to meet all students' learning needs. Alignment with performance standards under content standards 1.0 (Identify and Utilize Safety Procedure and Proper Tools) and 2.0 (Assemble Computer Hardware).

## **Leadership Development**

Were funds used for leadership development? Yes

Student travel to support the Business & Marketing Education at DHS: The Marketing program utilized funds to send students to the DECA conference in Las Vegas.

# **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

Professional Development for Health Science & Public Safety at YHS: The program incorporated the use of anatomy in clay conversion kits, giving students a detailed look at the bones, muscles and ligaments that comprise a human body. Staff training on the use of Anatomy in Clay models using clay.

Professional Development for Skilled & Technical Sciences at DHS: At AU, you learn from the best in the business. That not only makes you more productive and valuable in your job, it provides insight and information you can share with your whole team when you return. It is a great opportunity to learn about the future of making things, explore new tools and technologies, plus get insider tips and tricks and

network with peers, partners, expert speakers, and Autodesk product teams, and take free Autodesk Certification exams.

### Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

Materials to support the Agriculture & Natural Resources program at YHS: Animal Science, Horticulture, and Agriculture Business will utilize the funds provided to purchase rakes, hoses, soil, horticulture plant flash cards, Soil test kits, pHep 5 testers, pH testers, pH storage solutions, Next Generation Sterile Pipettes, Microscope slides, Micro cover glasses, beakers, beaker stands and other supplies to support the real world, work ready goals set for all CTE students in LCSD. Performance standard 2.1 (Compare and Contrast Feedstuffs for Livestock), 2.2 (Create Balanced Livestock Feed Rations), 6.6 (Manage Animal Health), and 1.1 (Recognize the role of Ag. In Society), 1.3 (Explore the World Food Supply).

Materials to support Health Science & Public Safety at YHS: Nursing Assistant program used funds to purchase industry standard equipment and supplies such as bandages, gloves, CPR masks, mask bag valve, student blood pressure kits, and AED practi-trainer kits. Also used funds to renew the Nursing Assistant program with the State Board of Nursing. Performance standard 1.1 (Understand the scope of practice), 1.4 (Understand how role fits into overall health environment), and 3.1-3.3 (Promote residents' dignity, rights, and safety).

Materials to support Health Science & Public Safety at FHS: Nursing Assistant Program utilized funds to purchase rinse free foam soap, gloves, bed pads, etc. Also, used funds to renew the Nursing Assistant program with the State Board of Nursing. Performance standard 1.1 (Understand the scope of practice), 1.4 (Understand how role fits into overall health environment), and 3.1-3.3 (Promote residents' dignity, rights, and safety).

Materials to support the Information & Media Technologies at FHS: Photography program purchased supplies to include MagLight LED flashlight, muslin backdrop, Cannon EOS rebel camera, photo paper, etc. The use of Cannon EOS rebel cameras will enable more students to be taking photos and exploring the use of the many effects the camera can apply to the digital images. Up to date technology alongside the real world application allows students to express their creativity and share their achievements with students, parents, and the local community. Performance standards 1.1 (Investigate the role and development of Photography in past and present cultures and current trends), 3.2 (Demonstrate use of various lenses and their application, and 4.1 (Demonstrate proper exposure settings).

Graphic Design utilized the funds to purchase laser printer toner, brochure paper, flash drives, etc. Student will have access to up-to-date technology and create banners, and advertisements for all kinds of events. Performance Standards included in content standards 1.0 (Demonstrate Knowledge of The Graphics Industry and 2.0 (Apply Elements and Principles of Design to Communicate Visually).

Drafting & Design and Electronic Technology programs utilized funds to purchase laser printer toner, brochure paper, and other supplies. Class lessons align with performance standards under content standards 1.0 (Apply Fundamental Drafting Skills) and 2.0 (Apply Fundamental CADD Skills).

Materials to support the Skilled & Technical Sciences at FHS: Furniture & Cabinet Making Program purchased lumber, plywood, MDF, etc. Standards are 3.1 -3.4 (Identify Materials Properties and Hardware) and standards under content standard 4.0 (Identify and Apply Manufacturing Processes).

Electronic Technology program purchased items such as Electronic kits and components, and other supplies.

Welding Technology program purchased welding rod, safety glasses, welding gloves, etc. Performance standards 1.1-1.3 under content standard 1.0 (Identify Lab organization and safety procedures), 2.1-2.3 under content standard 2.0 (Apply Fundamental Print Reading, Measurement, and Layout/Fit-up Techniques), and 3.1 and 3.2 (Identify Material Properties of Metals) (Identify Filler Metals).

Materials to support Health Science & Public Safety at DHS: Nursing Assistant programs utilized funds to purchase standard supplies such as gloves, gowns, privacy curtains, bed pans, and other industry

standard equipment. Also, used funds to renew Nursing Assistant program with the State Board of Nursing. These supplies will assist with the meeting of performance standards: Performance standard 1.1 (understand the scope of practice), 1.4 (Understand how role fits into overall health environment), and 3.1-3.3 (Promote residents' dignity, rights, and safety).

Furniture & Cabinetmaking program utilized funds to purchase lumber, glue, lacquer, stain, thinner, paint, screws, nails, staples, etc. Students will meet performance standards through the fabrication process, some of the standards met are 3.1 -3.4 (Identify Materials Properties and Hardware) and standards under content standard 4.0 (Identify and Apply Manufacturing Processes).

Materials to support the Skilled & Technical Sciences at SVS: Construction Technology utilized the funds to purchase the wood and supplies for multiple projects the students will complete throughout the school year.

Information Technology items to support the Information & Media Technologies at SSHS. Drafting & Design program utilized the funds to purchase a new printer for design output from computer aided drafting & design software. Students will use industry standard equipment while applying their knowledge to real world applications and become work ready. Class lessons align with performance standards under content standards 1.0 (Apply Fundamental Drafting Skills) and 2.0 (Apply Fundamental CADD Skills).

Information Technology items to support the Information & Media Technologies at YHS. Graphic design utilized funds to improve the ability of their desktop computers. Also, additional memory to allow the systems to run necessary software for a number of design outputs.

LCSD plans to continue improving the student success on the end-of-program assessment and the Workplace Readiness Skills Assessment and continue to increase our overall success rate annually. The Director of Secondary Curriculum (or designee) reviews with each site/program/instructor the previous school years assessment results, and collaborates on how to increase student success. Monthly accountability site visits are performed in order to provide any support that is needed. In addition, we have noticed that when we review what standards are being covered and review learner outcomes for the week that these processes are showing students becoming more proficient in the course competencies resulting in greater student success.

#### Section 2: General Description of Uses of Funds – School Based

There were no school-level activities/services supported with these funds.

## **Section 3: General Description of Uses of Funds – District Level**

There were no district-level activities/services supported with these funds.

### **Mineral County School District**

Funding Awarded: \$8,952.65
 Funding Expended: \$7,966.47

### Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in one criteria.

## Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

Yes, materials were purchased for CTE classes:

- Ink cartridges
- Paper
- Flip charts and pads
- Lap boards

- Master Quad Pod
- Lumber, nuts bolts, nails, screws and paint.

Mineral County High School received the entire grant amount of \$2,579.77. Forty-one students were served, 16 in Foods and Nutrition, 5 in Human Development 1, 6 in Business Software Applications, 1 in Office Management, and 13 in Construction Technology. No new programs were started. Services provided by this grant were general supplies such as ink cartridges, paper, flip charts and pads, lap boards, a Master Quad Pod, lumber, nuts, bolts, nails, screw and paint for the Business Administration Program, Construction Technology, FCS and Foods I, II and III. These supplies provided the tools and supplies for the teachers to teach the students to the common core and CTE standards. The outcome is that we expect to have 17 CTE completers in the 16-17 School Year.

## Section 2: General Description of Uses of Funds – School Based

No funds were used at the school level.

## **Section 3: General Description of Uses of Funds – District Level**

No funds were used at the district level.

### **Nye County School District**

Funding Awarded: \$108,218.85
 Funding Expended: \$104,960.47

# Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in three criteria.

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

All of the consumable and non-consumable supplies as well as books and technology supplies support practical application of occupational skills. Supplies that were purchased through this grant were used in classroom simulation of work-based requirements. Hands-on participation as well as some scenario-based learning were part of all CTE courses offered in the district. Students learn in the classroom as if they were in a workplace environment. Funding was used to support such programs as the culinary program, graphic arts programs, business programs, video production, photography, welding, CAD, automotive and furniture programs providing students with the opportunity to learn without a shortage of supplies to support the completers.

Round Mountain High School continued to develop the Natural Resources and Wildlife Management program along with the Agriculture Mechanical Engineering Technology Equipment Fabrication Systems. Funding was used to support classroom hand-on activities and student projects. The teacher focused on SAE projects to prepare students to earn chapter and state degrees in FFA. Round Mountain is the only school to offer agriculture in our district.

Tonopah High School expanded its welding sequence to include the second level of coursework, using funding to support this expansion. Tonopah also used funding to support curriculum alignment in Video Production and Graphic Arts. Both teachers share equipment and classroom space that has been developed into a fires class lab for CTE. The Family and consumer science program also benefited from funding, allowing students to participate in hands on experiences that engage them in learning.

Pahrump Valley High used funding to enhance the auto technology classroom and provide students with supplies that support the standards. Culinary Arts and Information and Media Technologies used supplies to support and expand the curriculum that was being taught.

## **Leadership Development**

Were funds used for leadership development? Yes

Pahrump Valley High School began a student FBLA program during the 2015-2016 school year. Because PVHS has a 60% free and reduced lunch rate, funding was used to support the creation of the new student organization. The teacher and students needed tools, such as the videos and professional development to be successful. The school administration worked with a local businessman to get the program up and running. One of the teachers at PVHS took over as the FBLA advisor and will continue to support the student organization.

Beatty High School and Round Mountain High School continue to support strong student organizations engaging in leadership skills as well as citizenry skills. Nye County School District has not been able to assist the student organizations with grant funding for nationals in the past. The allocations were used mostly for consumables and to improve programming. With the additional funding, NCSD is able to support travel costs for national competitions. This opportunity will support improved student organizations and will allow more students to learn leadership skills that will assist them with college and career readiness.

## Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

Funding was used to bring a 100 and 320 panel into the auto shop to hook up a small welder and tire balancer. An automatic transmission flush machine was also purchased with the funding. Tonopah High School received service drops for the welding shop.

- Pahrump Valley High School \$39,058.86 633 students served.
- Tonopah High School \$24,231.66 119 students served.
- Round Mountain High School \$29,340.87 59 students served.
- Beatty High School \$15,587.46 157 students served.

Nye County School District increased the number of sequence completers during the 2015-2016 school year. There is also an increase in the percentage of students that passed the technical skills exams but a decrease in the number that passed the workplace readiness skills exam.

Nye County School District added Welding II to the sequence at Tonopah High School using the allocated funding. Pahrump Valley High School also began an FBLA.

# Section 2: General Description of Uses of Funds – School Based

No funds were used at the school level.

## **Section 3: General Description of Uses of Funds – District Level**

No funds were used at the district level.

# **Pershing County School District**

Funding Awarded: \$14,461.97
 Funding Expended: \$11,360.45

## Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in two criteria.

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

Supplies were purchased for classroom instruction including: A Bandsaw, Iron Worker components, materials, welding, welding helmets, wrenches, laminating supplies, glue biscuits, sandpaper, drills,

safety glasses etc. These supplies add to the overall effectiveness of our agriculture and natural resources programs, along with skilled and technical sciences programs.

### Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

Funds were used to purchase and install a 40' cargo container with rollup doors. This container will be used to store purchased materials and equipment safely and securely. This helped align our programs with standards AGMET 1.1

## **Section 2: General Description of Uses of Funds – School Based**

No funds were used at the school based level.

## Section 3: General Description of Uses of Funds – District Level

There were no district level activities/services that were funded by this grant.

# **Washoe County School District**

Funding Awarded: \$921,434.29Funding Expended: \$919,943.07

# Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in eight criteria.

Washoe County School District's (WCSD) School Year (SY) 2015-16 allocation funds were used to support standards and instruction with a focus on program expansion, improvement and support. This was primarily done through the purchase of instructional materials; supporting Career Technical Student Organization (CTSO) development by subsidizing registration and travel fees; and supporting facilities, equipment and materials through purchase of industry-standard consumable and non-consumable supplies for Career and Technical Education (CTE) classrooms. Additional funds were spent on teacher/staff allocations to support expanding programs, as well as events and activities that engaged current and future CTE students to the business and educational community. As a result of this funding and classroom-level support, teachers were able to provide high quality instruction resulting in high levels of skill attainment and connect students to community members to develop career understanding. Evidence of this outcome can be found in the pass rates on end-of-program assessments, the number of students participating in CTSOs and earning recognition as one of the top three students in Nevada, and overall CTE program growth from SY 2013-14 to SY 2015-16.

### **Identifiable Student Outcomes**

#### **Student Enrollment**

Total Number of Students Enrolled Per School Year	Total HS Enrollment District	CTE Enrollment (duplicated	Level 1 Enrollment	Level 2 Enrollment	Level 3 Enrollment	Work Exp & AS Enrollment
SY13-14	18,824	6,120	4,564	1,148	272	0
SY14-15	18,559	7,466	5,258	1,627	521	60
SY15-16	18,688	8,787	6,317	1,593	771	76
Anticipated SY16-17	18,706	9,300	0	0	0	0

#### **CTE Assessment Data**

School	Student	Participation	Pass Rate	Participation Rate	Participation	Pass Rate
Year	in L2C or L3 course	Rate End-of- Program	End-of- Program	Workplace Readiness Assessment	Rate Workplace Readiness	Workplace Readiness
SY12-13	100	99.0%	53.5%	179	97.8%	62%
SY13-14	229	97.8%	62.0%	303	92.0%	80.2%
SY14-15	406	99.0%	74.37%	394	99.5%	91.8%
SY15-16	662	98.9%	73%	590	97.9%	90.8%

# **CTSO Participation Rates & Outcomes**

CTSO	Number of School Chapters	Total Course Enrollment	Participants Leadership	Total Students Leadership	Participants State	Total Students State	Total Placing in Top 3	Total Qualifying for Nationals	Elected State Officers 14-15
DECA	1	40	0	0%	5	12.5%	0	0	0
FBLA	4	1580	10	0.6%	111	7.0%	57	24	1
FCCLA	5	439	11	2.5%	30	6.8%	32	7	1
FFA	2	260	26	10%	42	16.2%	22	5	1
HOSA	5	1050	30	2.8%	104	9.9%	23	3	0
SkillsUSA	10	5418	97	1.8%	302	5.6%	80	27	4

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

All WCSD CTE programs follow the Nevada CTE Course Catalog and programs follow the approved state CTE standards. In SY 2014-15, teachers worked with their peers to refine comprehensive curriculum maps for each level 1 and level 2 class taught. In the SY 2015-16, these maps were fully implemented across the district, shared with administrators to help them understand expectations, and aligned with common semester finals.

These curriculum maps ensure consistency among programs and provide a stable framework to lead students to program completion levels, regardless of transiency. Additionally, these curriculum maps connect state CTE standards, Nevada Academic Content Standards, articulation objectives and employability standards, providing evidence that outcomes are embedded in daily classroom curriculum. Finally, this valuable tool provides a guide for new CTE teachers entering the teaching profession, as well as a guide for administrators as they evaluate the CTE teachers and programs.

Additionally, teachers completed the creation of common semester assessments to support all level 1 and level 2 curriculum maps. All level 1 common semester assessments were piloted in SY 2014-15, refined based on district results, and implemented as part of the final exam grade in SY 2015-16. All level 2 common semester assessments were piloted in SY 2015-16 and will be refined/implemented as part of the final exam grade in SY 2016-17.

Instruction Materials	Funding Total
Text & Trade Books	\$48,100
Web-Based Programs	\$71,496
Total	\$119,596

### **Leadership Development**

Were funds used for leadership development? Yes

WCSD recognizes Career Technical Student Organizations (CTSOs) as a critical learning component of CTE programs, helping students explore their career options, practice employability skills, and prepare for productive citizenry and leadership. CTSOs provide access to authentic instruction, supportive adults, a task-focused peer group, clear goals and rewards, and opportunities for achievement, leadership, and skill development. Research shows that as student involvement in CTSOs increases, so does academic

motivation and engagement, grades, career self-efficacy, college aspiration, and employability skills. WCSD has allocated funding to support CTSO travel for leadership and state events in order that grant funds could be used to support student registration and national participation for state medal winners. WCSD will continue to expand opportunities for students to access the CTSO most closely associated with their program of study.

CTSO	Funding Total	No. of Programs	Enrollment	Total Participation	Overall Participation
DECA	\$595	1	40	5	12.5%
FBLA	\$46,519	4	1,580	121	7.6%
FCCLA	\$6,139	5	439	41	9.3%
FFA	\$11,672	2	260	68	26.2%
HOSA	\$8,100	5	1,050	134	12.8%
SkillsUSA	\$64,549	9	5,418	399	7.4%
Total	\$137,574	26	8,787	768	8.7%

# **Practical Application of Occupational Skills**

Were funds used for work-based learning opportunities? Yes

WCSD is committed to providing opportunities to practice occupational skills in a real-world setting. This is done through work-based learning experiences, classroom simulations, and community involvement. In SY 2015-16, WCSD continued and expanded its effort to connect programs with local businesses to expose students to more career opportunities. For example, WCSD continued its relationship with St. Mary's Regional Medical Center and Renown to provide on-site training for students in medical courses across the district and worked closely with Northern Nevada Medical Center and the Veteran's Hospital to create opportunities in their facilities for SY 2016-17. Additionally, both Renown and Veteran's will expand their access to include IT, Human Development, and Business students.

In 2015-16, the WCSD/Microsoft partnership was further expanded to bring Business and IT students together with industry experts in a localized version of the "ImagineCup" competition. This will be expanded to include middle school students in SY 2016-17. In addition, the WCSD Signature and CTE/Education Alliance of Washoe County partnership was used to connect more students to industry opportunities through job shadows and work experience. The foundation was developed for managing these effectively and will be fully implemented in SY 2016-17.

# **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

WCSD recognizes that CTE teachers must maintain a high level of competency and proficiency in the technical areas in which they teach, as well as being well-connected to the academic standards, to provide students with the resources that will best prepare them for postsecondary success. To that end, all CTE teachers participate in school professional development held at their site, as well as a monthly professional development specific to CTE disciplines. As well, grant funds are used to send teachers to conferences that allow them to remain current on industry trends.

In SY 2015-16, three notable activities occurred to support the professional development and sustainment of qualified personnel. First, a group of teacher-leaders worked to develop a rubric to measure implementation of 21st Century learning strategies. These teachers conducted monthly observations in every CTE classroom to gather data about the use of 21st Century strategies. Second, a retired CTE teacher was hired to provide classroom level support for new teachers to ensure success. Finally, all teachers were given the opportunity to learn basic computer programming skills as an extension of topics explored in monthly professional development. Twenty teachers participated, earning either a stipend for their time or professional development credit.

Professional Development	Funding Total	Teachers Involved/Impacted
21st Century Observations	\$14,010	24/90
New Teacher Mentor	\$13,500	12
NCLab Coding Training	\$5,760	20
Total	\$33,270	0

### **Facilities, Equipment, and Materials**

Were funds used for facilities, equipment, and materials? Yes

WCSD is committed to providing students with facilities, equipment, instructional materials and supplies that comply with health and safety standards, are aligned with current and emerging technologies, and are of sufficient quantity and quality to meet the needs of students enrolled in CTE courses. In the past several years, WCSD has demonstrated this commitment by allocating more than \$2 million to upgrade facilities for improved CTE offerings associated with the development of Signature Academies, as well as allocating an additional \$8.5 million in upgrades to improve facilities in seven high school CTE programs, each aligned with Nevada's economic development plan. Nearly \$6 million in funding for these projects was started in SY 2014-15 and resulted in new facilities for SY 2015-16 at Reed High School (CAD lab and maker's space). For SY 2016-17, students will have access to new facilities at North Valleys High School (greenhouse and Ag MET fabrication lab) and at Hug High School (Sports Medicine facility, Human Development classroom, Culinary Arts facility). Additionally, private grant funds were used to make substantial improvements to Galena High School (environmental engineering and aerospace engineering) and Spanish Springs (business) that were ready for student use at the beginning of SY 2016-17 school year. In SY 2016-17, work will begin on upgrades and improvements at Sparks High School to expand classroom and technical space for the Manufacturing Technologies program.

Grant funds will continue to be used to provide necessary equipment, instructional materials, building improvements and supplies for all programs and facilities.

CTE Program	Funding Total	No. of Schools	<b>Duplicated Enrollment</b>
Agriculture	\$1,471	2	211
Business	\$36,838	6	726
Education, Hospitality & Human Services	\$63,913	12	2345
Health Science	\$20,523	5	887
IT & Media	\$122,101	12	2575
Skilled & Technical	\$141,956	12	2043
Total	\$386,802	-	8787

### **Career Guidance**

Were funds used for career guidance services? Yes

Allocated funds were expended to transport students to interact with industry for several community events including Manufacturing Day, Operation Healthcare Bound, UNR Engineering Day, the WCSD Career Expo, and other events throughout the year. These events helped middle school and high school students understand the opportunities available in our community and what kind of knowledge is needed to enter into and have success in careers of interest.

Services	Funding Total	# Students Attending
Student Transportation to Work-Place Learning Events	\$16,000	6,000
Total	\$16,000	6,000

## **Program Promotion and Marketing**

Were funds used for program promotion and marketing? Yes

In SY 2015-16, WCSD worked with the Governor's Office of Economic Development, Economic Development Authority of Western Nevada, Dream It! Do It! Nevada, and local manufacturers to create a comprehensive marketing campaign to change the perception of manufacturing and increase enrollment in skilled and technical programs related to manufacturing careers. Development of this strategy included video PSA messages that feature Governor Sandoval and local manufacturers. These were aired in local movie theaters during the busy summer months and will be played on local public television and news programming in SY 2016-17. Static advertisements were also developed that will be featured on billboards, websites and publications for distribution to a wide variety of audiences.

The most notable program promotion of the year was the WCSD Career Expo designed to efficiently and effectively educate all 8th graders in our district about workforce career opportunities and the CTE programs available to them in preparation for these careers. In partnership with the Education Alliance, Counseling Department and Junior Achievement, 4,500 8th grade students interacted with representatives from 65 businesses in our community, including Panasonic, Tesla, Renown, Microsoft, Click Bond and many, many others representing the wide range of industries in our community. It is anticipated that this will be an annual event and continue to grow to eventually include 7th graders, as well.

Program Promotion	Funding Total
Manufacturing Promotion	\$4,940
WCSD Career Expo Event (4,500 students)	\$17,805
Total	\$22,745

#### Student - Teacher Ratio

Were funds used for class sizes to ensure effective instruction and safe conditions? Yes

To support the expansion of the Sports Medicine program at Hug High School, a .5 FTE teacher allocation was funded in SY 2015-16. This allocation allowed for the addition of three classes of level 2 and level 3 students. The funding for this position was assumed by the school in SY 2016-17.

❖ .5 FTE for Sports Medicine \$25,211

## Section 2: General Description of Uses of Funds – School Based

WCSD's goal is to strategically increase the effectiveness of CTE programs and course offerings to ensure students complete a three-year program of study. State allocated funds are primarily used to support this goal through expansion, improvement and program support. This is accomplished through the purchase of materials and equipment that ensure students have access to relevant tools of the industry on which they are focused and in support of participation in CTSOs, particularly leadership, state and national conferences. In SY 2015-16, 12 District high schools and two District-sponsored charter schools received allocated funding to support the growth of the school programs.

## **Funding Summary: Totals by School**

Use of Funds	AACT	ACE	Damont e Ranch	Galena	Hug	ICDA	Inclin e	McQuee n	North Valley	Reed	Reno	Spanis h	Sparks	Wooste r
Enrollment (duplicated)*	1087	268	668	654	611	132	105	585	740	1268	618	1740	304	332
Expansion	1,177	0.00	0.00	0.00	23,061	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00
Improveme	1,248	0.00	1,248	1,248	1,248	0.00	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248
CTSO Developme	53,318	0.00	15,125	2,405	2,375	0.00	0.00	935	8,115	6,291	19,356	26,324	2,735	595
Program Support	114,05 2	6,250	21,560	31,518	26,358	6,330	2,370	24,524	28,344	65,752	40,997	95,935	31,517	41,144
Total	170,88	6,518	38,601	35,825	53,653	6,452	3,723	27,292	38,447	74,559	62,219	125,24	35,804	43,319

<sup>\*</sup>Total includes Enrollment (duplicated)

### **Section 3: General Description of Uses of Funds – District Level**

A portion of funding received through the FY16 State Allocated Grant was assigned to indirect costs. Those funds are outlined below. No other funding from the State Allocated Grant was used to support any district-level activities/services.

FY16 Indirect Costs \$28,483.89 (Expended)

## **White Pine County School District**

❖ Funding Awarded: \$31,875.37❖ Funding Expended: \$24,706.45

## Section 1: Overall Description of Project and Impact Statement

Funding received from State Allocations went to program improvement objectives in three criteria.

#### **Standards and Instruction**

Were funds used for standards and instruction? Yes

The Miracle of Birth DVD was purchased for the Health Science program. 18 students were served. Their knowledge of the birth process increased as a result of the DVD.

An Ag Curriculum Package was purchased for the Ag program at WPHS. 64 students participated in this curriculum.

Mitchell on Demand was purchased for the Auto Technology program. This program exposes students to interactive software designed to help them diagnose problems and determine paths towards solution. 74 students were served.

## **Qualified and Competent Personnel**

Were funds used for professional development and other for personnel? Yes

The high school counselor attended CTE leadership training at the state conference. Individuals progressed in their understanding of how CTE affects student learning and motivation as a result of these funds.

The Culinary teacher attended the NACTE conference and the NV Culinary Arts Workshop. Her ability to connect with students and inspire them to work hard at their craft was improved through her participation.

## Facilities, Equipment, and Materials

Were funds used for facilities, equipment, and materials? Yes

The vast majority of funds were spent here. In Agricultural Science and Natural Resources, metal, pots and trays, a soil bin, potting bench, plastic greenhouse flooring, aeroponics, plastic cabinets, plant support and cages, propagation tables, and soil, fertilizer, seeds, etc., were purchased. 68 students in Lund and WPHS utilized these materials. They were able to gain hands on experience by using the materials.

For Culinary, cookware, pan racks, chafing dishes, and a freezer were purchased. 69 students used these materials and benefitted from the exposure to industry-standard supplies.

For Skilled and Technical Sciences, a hoist, and tire changer were purchased. 74 students used these materials and benefitted in their accumulation of industry techniques as a result.

# Section 2: General Description of Uses of Funds – School Based

No funds were used at the school level.

# **Section 3: General Description of Uses of Funds – District Level**

No funds were used at the district level.